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EDITORIAL NOTE

Correction: The title of the unpublished thesis listed in entry no. 626, January 1951, should read: **A study of an experimental projective technique: Robinson-Bradt Test of Imagination.**

GENERAL

3499. Braatøy, Trygve. (*Ullevål Hosp., Oslo, Norway.*) **Psykoanalyse og Moral.** (Psychoanalysis and morale.) (3rd ed.) Oslo, Norway: J. W. Cappelens, 1949. 189 p.—This book is a compilation of articles and lectures by a Norwegian psychiatrist, spanning a wide field of topics such as: morale and psychoanalysis, war psychosis, the death of Sigmund Freud, neurosis from a psychoanalytical point of view, post-war mentality, etc. While most of the articles are of general interest, some are of a polemic nature in regard to viewpoints and problems arising out of certain Norwegian post-war conditions.—*M. L. Reymert.*

3500. Cattell, Raymond B. (*U. Illinois, Urbana.*) **The integration of psychology with moral values.** *Brit. J. Psychol.*, 1950, 41, 25-34.—"When a social scientist makes recommendations for progress it is surely not too much to ask that he state clearly what human values he regards as most important." Value systems are implied in many of our theories and in the interpretation of much of our data. ". . . from a scientific point of view it does not matter whether we agree or disagree with given values, but . . . it does produce a very unscientific confusion unless they are stated. . . . it seems questionable whether a social scientist can or should escape from the problem of having to make a thorough moral examination of the use being made of his results or of the set-up in which he is asked to answer a specific question." 19 references.—*L. E. Thune.*

3501. Cresson, André. **Le mécanisme de l'esprit.** (The structure of the mind.) Paris: Librairie Armand Colin, 1950. 216 p. 180 fr.—The purpose of the book is to discuss the mechanisms by which the person develops ideas and acts on them. To this end, the author discusses the physiological aspect of the automatic reactions that maintain the body, the structure of knowledge and understanding, the will. He concludes that each individual responds in his singular way to incidents, and that the individual is born with tendencies that govern his thoughts and actions. He notes that the most differentiating characteristic between animals and man is the latter's power of abstraction. Finally he

notes that there are two main attitudes about man from which to choose: (1) that man is an approximation of God; (2) that man's salvation is a durable society that will change with man's own biological and cultural mutations. 22 references.—*J. Cowen.*

3502. Freud, Sigmund. **Gesammelte Werke chronologisch geordnet. Sechzehnter Band: Werke aus den Jahren 1932-1939.** (Collected works chronologically arranged. 16th volume: works from the years 1932-1939.) London: Imago Publishing Co., 1950. 297 p.—In this 16th volume of the collected works of Sigmund Freud the writings from 1932-1939 are reproduced in the order of their original appearance as follows: (1) On the obtaining of fire; (2) Why war? (3) 1935 postscript to "Self-portrait"; (4) The fineness of an erroneous act; (5) Constructions in analysis; (6) Ending and endless analysis; (7) The man Moses and monotheistic religion. Letters, commemorative words, prefaces written by Freud during the same period follow. Appended is a table of contents of the 18 volumes of the collected works of Freud.—*F. C. Sumner.*

3503. Garrett, Eileen J. **The sense and nonsense of prophecy.** New York: Creative Age Press, 1950. 279 p. \$2.75.—The author, "a serious psychic researcher who strives to increase man's knowledge" is "wrathful at being lumped with the frauds and spook artists" and so attempts to separate "the truth from tea leaves." Historical treatment is given of the various aspects of occultian practise, with expose based upon her personal contact with these crafts. Descriptive material is included regarding the types of seekers she has encountered and what they are seeking, with the conclusion that "extra-sensory perception attracts more than its share of people who can most kindly be described as peculiar." The plea is for a more serious scientific appraisal of paranormal phenomena.—*L. R. Steiner.*

3504. Keller, Fred S., & Schoenfeld, William N. (*Columbia U., New York.*) **Principles of psychology; a systematic text in the science of behavior.** New York: Appleton-Century-Crofts, 1950. xv, 431 p. \$4.00.—An attempt to construct an elementary psychology textbook integrating classical and contemporary thought to represent today's dominant theoretical trend under the following headings: psychology and the reflex, respondent conditioning, operant conditioning, extinction and reconditioning, generalization and discrimination, response variability and differentiation, chaining, secondary reinforcement, motivation, emotion, and social behavior. 306 references are combined with the author index.—*A. J. Sprow.*

3505. Lagneau, Jules. *Célèbres leçons et fragments.* (Celebrated lessons and fragments.) Paris: Presses Universitaires de France, 1950. vii, 322 p. 600 fr.—This collection of writings is preceded by an article by Michel Alexandre, followed by biographical notes stating that Professor Lagneau died in 1894, at the age of 43 years, leaving no published work as the result of his research and teaching. The book contains some of his letters, and the outline and content of each of four extended courses given to his students. These lessons comprise a study of evidence and certainty, of perception, judgment, and the subject of God.—G. E. Bird.

3506. Myerson, Abraham. *Speaking of man.* New York: Knopf, 1950. vii, 279 p. \$3.00.—In the 15 essays gathered in this volume Dr. Myerson comments, from the storehouse of his scientific, psychiatric, and human experience, on the nature of man and his many problems. The titles of the essays are suggestive rather than descriptive but such topics as intelligence, mental disease, sterilization, individuality, heredity, genius, women, and psychiatry are treated with urbanity and wit. A biographical note by Mildred Ann Myerson and a bibliography of Dr. Myerson's works are included.—C. M. Louitt.

THEORY & SYSTEMS

3507. Baynes, H. G. *Analytical psychology and the English mind.* London: Methuen, 1950. ix, 242 p. 18s.—This collection of essays and lectures treats of various matters relating to Jung's analytical psychology: the unconscious as the real object of psychology; a demonstration of analytical practice; analytical psychology and the English mind; the provisional life; the psychological background of the parent-child relation; Freud versus Jung; the importance of dream-analysis for psychological development; the ghost as a psychic phenomenon; Jung's conception of the structure of personality in relation to psychical research; the psychological origins of Divine kingship; what it is all about.—F. C. Sumner.

3508. Beecher, Willard. The myth of "the unconscious." *Indiv. Psychol. Bull.*, 1950, 8, 99-110.—Misapprehensions regarding the "unconscious" are mainly of two kinds: (1) that the "unconscious" assures nothing is ever forgotten, and (2) that it possesses its own will which opposes "good intentions." According to Adler, difficulty arises from the individual's "lack of understanding of himself in relation to those around him" ("unreal expectations") and not from "forgotten memories." Adler opposed partitioning the psyche feeling that the individual strives in a unified manner toward security and survival. He viewed "neurotic conflict" not in terms of "Unconscious" and "Conscious" factors, but as "the disparity between the present life-training of the individual and the demands of a confronting situation which asks more of the individual than he is prepared and willing to give."—A. R. Howard.

3509. Bruck, Mark Anton. The concept of "the unconscious." *Indiv. Psychol. Bull.*, 1950, 8, 81-98.—Freud's predecessors and their contributions to the concept of "The Unconscious" are cited. Incorporation by Freud of certain ideas of Jung and Adler also is claimed. Several theoretical differences between the Freudian and Adlerian approaches are briefly discussed. "Since the Adlerian believes in the unity of the personality . . . unconsciousness becomes for him a technical detail instead of a foundation for mysterious phenomena." 21 references.—A. R. Howard.

3510. Cantril, Hadley. *(Princeton U., N. J.) The "why" of man's experience.* New York: Macmillan, 1950. xiii, 198 p. \$2.75.—The author states that he is "trying to outline an approach which may help pose problems from a fresh point of view and thereby increase our understanding." The approach is based on "the convergence of evidence from psychology, biology, and investigations of man's social behavior." Man's outstanding characteristics are the ability to sense value in the quality of his experience and the tendency to seek enhancement of the value aspects of experience. These and other characteristics of man are shown to be interrelated in all of the important "transactions of living," such as purpose, action, meaning, and social participation. The first chapter presents a brief discussion of the nature of scientific inquiry and of the present status of psychology. Bibliography.—P. E. Lichtenstein.

3511. Choisy, Maryse. *Autour des Congrès de Paris.* (On the psychoanalytic meetings held in Paris.) *Psyché*, 1950, 5, 770-776.—The world-wide meetings on psychoanalysis held in Paris in 1950 show that "progressive" psychoanalysis is taking the lead over "orthodox" psychoanalysis.—G. Besnard.

3512. Cossa, Paul. *La cybernétique ou l'art de tenir le mécanisme pour démontré.* (Cybernetics or the art of holding mechanism for demonstration.) *Ann. méd.-psychol.*, 1950, 2, 1-10.—Cybernetics is criticized as making for a false belief that mechanism is proven beyond doubt, that mind is merely a complex electronic mechanism or robot. Cybernetics demonstrates mechanistically homeostasis only by reproducing the epiphenomenal, by omitting the indeterminates.—F. C. Sumner.

3513. Dalla Nera, G. *Aspetti teorico-pratici della riflessologia pavloviana.* (Theoretico-practical aspects of Pavlovian reflexology.) *Salesianum*, 1948, 10, 1-28.—This article presents a summary of Pavlov's system, with a critical evaluation of its theoretical structure and of its practical applications. The evaluation is mainly positive. The system, built on a physico-mathematical basis, has no place for spirit, which, however, is never expressly denied. Apart from certain exaggerations which result from the bias of a mechanistic hypothesis, the work of Pavlov is a serious contribution to our knowledge of man, and has provided us with simple, original and valuable techniques for education and for therapy.—J. W. Stafford.

3514. **Disertori, Beppino.** (*U. Padua, Italy.*) **Psychoanalyse und Metaphysik.** (Psychoanalysis and metaphysics.) *Schweiz. Arch. Neurol. Psychiat.*, 1950, 65, 52-61.—Over against materialistic science which has sought most vigorously to restrict consciousness to an ever smaller sphere, to prove its non-existence or its inefficacy, and to regard mind as epiphenomenon and soul as a metaphysical entity, Freud in his psychoanalysis has sought to make of these so-called metaphysical entities—the soul, the unconscious, the Id, the Ego, and the Superego—realities powerfully determinant of certain symptoms of neuroses and even of psychoses and ultimately of symptoms expressing themselves in alterations of physiological functions of the organism. An exposition is given of these hyperphysical determinants to which Freud would point.—*F. C. Sumner.*

3515. **Gloss, George M.** (*U. Maryland, College Park.*) **Ontology: Part I, an eclectic philosophy of energy emergence; Part II, the application of an eclectic philosophy of energy emergence for evocative education.** Washington, D. C.: Author, 1950. 21, A-10 p. \$2.00. (Mimeo.)—The survival and development of man and society are related to the control of the use of energy. Suggestions are made regarding the best means for releasing human energies and thus furthering social progress.—*P. E. Lichtenstein.*

3516. **Isaacs, Nathan.** **The foundations of common sense.** New York: Roy, 1950. vii, 208 p. \$3.50.—The author attempts to explain how we come to believe in our common sense world. He denies that knowledge is a special preserve of the philosophers and affirms that "an adequate empirical account of knowledge must precede any philosophic discussion of its problems." The first 2 chapters deal with the inadequacies of the philosophic theory of knowledge. The next 4 chapters offer experiential bases for our distinction between truth and falsity, for our belief in the objective world, and for our belief in causality. The final chapter discusses the bearings of an adequate psychology of knowledge on the philosophic theory of knowledge.—*P. E. Lichtenstein.*

3517. **Nakamura, K.** **Skinrigaku ni okeru operationism no shomondai.** (The problems of an operational psychology.) *Jap. J. Psychol.*, 1948, 19, 65-75.—This article constitutes a critical review of the psychological literature on operationism with respect to conflicting points of view towards the chief problems that confront an operational approach to psychological theory. The five problem areas discussed are: (1) the specificity and generality of concepts; (2) functional relationships and theory; (3) the nature of explanation; (4) different types of operationism; and (5) public and private events and the nature of an operation. 29-item bibliography.—*W. F. Day.*

3518. **Teplov, B. M., & Volkov, N. N.** **Predislovie.** (Preface.) *Izv. Akad. pedag. Nauk RSFSR*, 1950, No. 25, 3-6.—The work of the present issue of the journal is summarized and opposed to "bour-

geois psychology," which "separates work from creativity," assigning the latter exclusively to art.—*I. D. London.*

3519. **Thouless, Robert H.** **The place of theory in experimental psychology.** *Brit. J. Psychol.*, 1950, 41, 14-24.—The postulates used in many current attempts at psychological theorizing are "so vague as to be of little real use as a guide to expectations, and it is possible that the effort to express psychological theory in this way is premature." Many of our expectations as to psychological fact are implied by the choice of language in expressing theories and we are free to choose our theoretical language. We are under necessity to make this choice so that the implications of our language conform to the observed facts.—*L. E. Thune.*

3520. **Trimmer, John Dezendorf.** (*U. Tennessee, Knoxville.*) **Response of physical systems.** New York: Wiley, 1950. ix, 268 p. \$5.00.—A system is subjected to an input and under domination of a "law," "code," etc., gives a response. The theoretical development of this concept is called "system response." System may refer "to a cell, a human being, a society" as well as to a physical system. In the present volume system responses of physical systems are developed on the mathematical basis of first and higher order differential equations. A wide variety of physical systems are used for detailed illustration.—*C. M. Louttit.*

3521. **Weiss, Edoardo.** (*Chicago (Ill.) Institute for Psychoanalysis.*) **Principles of psychodynamics.** New York: Grune & Stratton, 1950. ix, 268 p. \$4.00.—A systematic exposition of dynamic psychology is given from the psychoanalytic standpoint. Topics covered include: definition; principles of pleasure-pain and reality; the Ego and the Id; mental energy; fundamental theories of instincts and drives; the Ego and its relations; the concept of resonance; projection; the Super-Ego; narcissism and object-love; the preconscious; repression; emotional resistances; characteristics of the unconscious; erotic factors in personality development; auto- and allo-eroticism; the Oedipus-complex; trauma and anxiety; the dream phenomenon; the hysterias; obsessional and character neuroses and sexual perversions; principles of psychoanalytic therapy.—*F. C. Sumner.*

3522. **Wolff, Werner.** (*Bard Coll., Annandale-on-Hudson, N. Y.*) **Values and personality: an existential psychology of crisis.** New York: Grune & Stratton, 1950. x, 239 p. \$4.75.—Asserting that the crisis of our time is not only a reflection of intra-personal conflicts, Wolff postulates a theory called existential psychology: "an interpretation of data in terms of an individual's value system." This is seen to have important applications to psychotherapy, which, over and beyond resolving the patient's basic conflicts, should be oriented toward mobilizing all of his creative resources. The theme of existential psychology is "man as the questioner of his existence." It is primarily concerned with "values," and has mainly psychotherapy as its

object. Other parts of the book present the theory of existential psychology and existential problems in therapy. A variety of new terms are defined in a glossary. 268-item bibliography.—H. H. Strupp.

(See also abstracts 3557, 3863)

METHODS & APPARATUS

3523. Glezer, D. I. A. *Prisposoblenie dlia zapisi shunootdelenia sobaki, svobodno peredvigaiushchiesia po laboratornoi komnate.* (A device for recording salivation in a dog, freely moving about the laboratory room.) *Fisiol. Zh. SSSR*, 1949, 35, 467-477.—Details are provided for the construction of a recording device capable of registering salivary output in a freely moving dog.—I. D. London.

3524. Korotkin, I. I. K metodike izuchenia migatel'nykh uslovnykh refleksov u cheloveka. (A method of studying the wink conditioned reflexes in man.) *Fisiol. Zh. SSSR*, 1949, 35, 457-461.—The construction and use of a mechanico-pneumatic device for the study of conditioned wink reflexes are detailed and discussed.—I. D. London.

3525. Lund, Fredrik. (Karolinska Institutet, Stockholm, Sweden.) Plethysmographic investigations of the blood circulation in fingers and toes by means of the condenser manometer, particularly morphological studies of the digital volume pulse. *Acta med. scand.*, 1949, 135, 399-425.—For a plethysmographic examination of the blood circulation in fingers and toes, the condenser manometer was used. The instrument and the experimental method used are described. Owing to the sensitivity of the condenser manometer, the digital volume pulse can be recorded accurately even from part of the finger or toe. Pulse curves from fingers and toes of normal subjects are characterized by a steep ascent expressible in a short inclination time, and further by a peaked summit and an obvious dicrotism.—F. C. Sumner.

3526. Silfverskiöld, B. P. (Seraphim Hosp., Stockholm, Sweden.) A new ergograph. *Acta med. scand.*, 1949, 135, 60-62.—An ergograph can be quite easily produced by pumping air into an ordinary spirometer to which is coupled the rubber bulb from a sphygmomanometer. The spirometer's pen writes a work curve which sums up the single pressures and the total work. Examples of work curves obtained from an hysterical, from a patient with myasthenia gravis, and from a case of spastic paraplegia are furnished. Weakness of psychogenic origin can be easily differentiated from real fatigue.—F. C. Sumner.

(See also abstract 3940)

NEW TESTS

(See abstracts 3887, 4082)

STATISTICS

3527. Aitken, A. C. (Mathematical Institute, 16 Chambers Street, Edinburgh.) On the Wishart

distribution in statistics. *Biometrika*, 1949, 36, 59-62.—Wishart's distribution is the probability distribution of the estimates of $\frac{1}{2}k(k+1)$ moments of the second order, usually called variances and covariances, for a sample of n k -ary vectors drawn from a k -variate normal correlated population. Various methods have been given for the derivation of this valuable distribution, which evidently generalizes to the case of a symmetric and positive definite matrix variate the familiar gamma distribution of a scalar variate. Wishart's distribution is modified; and the moment-generating function of the estimates, matrix transformations and related vector transformations are discussed.—G. C. Carter.

3528. Blomqvist, Nils. (U. Stockholm, Sweden.) On a measure of dependence between two random variables. *Ann. math. Statist.*, 1950, 21, 593-600.—The properties of a measure of dependence q' between two random variables are studied. It is shown that q' under fairly general conditions has an asymptotically normal distribution and provides confidence limits for the population analogue of q' . A test of independence based on q' is non-parametric, and its asymptotic efficiency in the normal case is about 41%. The q' -distribution in the case of independence is tabulated for sample sizes up to 50.—G. C. Carter.

3529. Bross, Irwin. (Johns Hopkins U., Baltimore, Md.) Two-choice selection. *J. Amer. statist. Ass.*, 1950, 45, 530-540.—In many practical applications it is helpful to select one product commodity, plant variety, or technique from a set of alternative products. When there are only two products to be considered, this is called the two-choice selection problem. Several alternative rules are derived for determining sample sizes, i.e., amount of data on which the selection is to be based. The control of probabilities, control of losses, and maximum expected gain are discussed. Various approaches to this problem are compared.—G. C. Carter.

3530. Carter, A. H. (King's Coll., Cambridge U., England.) The estimation and comparison of residual regressions where there are two or more related sets of observations. *Biometrika*, 1949, 36, 26-46.—A technique is developed for estimating and comparing residual regressions where there are two or more related sets of observations. Specific formulae, in convenient form for calculation, are derived for the general case of p correlated samples with q independent variates. The special cases of $p = 2$ and of $q = 1$ are discussed, and the known results for independent samples are briefly deduced and compared. The underlying assumptions are discussed and a comparison of the method with that proposed by Yates is made.—G. C. Carter.

3531. Chand, Uttam. (U. North Carolina, Chapel Hill.) Distributions related to comparison of two means and two regression coefficients. *Ann. math. Statist.*, 1950, 21, 507-522.—The relative merits of statistics available for testing two means or two regression coefficients in relation to one-sided and

two-sided alternatives in case of unequal population variances are considered. In so far as the Behrens-Fisher statistic is concerned the discussion is confined to the consideration of the behavior of its probability of Type I error in repeated sampling from populations with a fixed value of the unknown ratio of variances. In connection with the tests between two means, the study takes its point of departure from the existing tests and investigates the probability of utilizing an approximately determinate knowledge about the unknown ratio of variances. In connection with the comparison of two regression coefficients and also of two linear regression functions, we consider the effect of two concomitant sources of variation, viz., the unknown ratio of residual variances and the ratio of the sums of squares of the fixed variates, on the probability of Type I and Type II errors of certain well known statistics.—*G. C. Carter*.

3532. Chapman, Douglas G. (*U. Washington, Seattle.*) Some two sample tests. *Ann. math. Statist.*, 1950, 21, 601-606.—Stein has exhibited a double sampling procedure to test hypotheses concerning the mean of normal variables with power independent of the unknown variances. This procedure is adapted to test hypotheses concerning the ratio of means of two normal populations, also with power independent of the unknown variances. The use of a two sample procedure in a regression problem is also considered. In general tests based on a two-sample procedure may not be as "efficient" in the sense of Wald as a strict sequential procedure. On the other hand the two sample procedure reduces the number of decisions to be made by the experimenter and it will, in certain fields, simplify the experimental procedure.—*G. C. Carter*.

3533. Chung, J. H. Sequential sampling from finite lots when the proportion defective is small. *J. Amer. statist. Ass.*, 1950, 45, 557-569.—A sequential plan for sampling from a finite population which contains a very small proportion defective is studied. A number of working formulae are developed and suggestions offered for their efficient use in practice. The actual operations of the plan are illustrated in an example in which the data and results of several tests are recorded.—*G. C. Carter*.

3534. Cohen, A. C., Jr., (*U. Georgia, Athens.*) Estimating the mean and variance of normal populations from singly truncated and doubly truncated samples. *Ann. math. Statist.*, 1950, 21, 557-569.—The problem of estimating the mean and variance of normal populations from singly and doubly truncated samples having known truncation points is studied. Maximum likelihood estimating equations are derived which, with the aid of standard tables of areas and ordinates of the normal frequency function, can be readily solved by simple iterative processes. Asymptotic variances and covariances of these estimates are obtained from the information matrices. Numerical examples are given which illustrate the practical application of these results.—*G. C. Carter*.

3535. Daniel, Cuthbert, & Heerema, Nicholas. Design of experiments for most precise slope estimation or linear extrapolation. *J. Amer. statist. Ass.*, 1950, 45, 546-556.—The problems of slope-estimation and of linear extrapolation when the precision of the Y -measurements changes with different values of x are discussed. Tables are presented which show, for each of these problems, the optimum placement of x -values and the optimum distribution of the N observations for selected relationships between σ and x . The optimum placements are seen to be the same for the two problems, but for the latter, the optimum distribution depends on the nearness or remoteness of the extrapolation.—*G. C. Carter*.

3536. Dixon, W. J. (*U. Oregon, Eugene.*) Analysis of extreme values. *Ann. math. Statist.*, 1950, 21, 488-506.—Many times values occur which are "dubious" to the analyst and it is necessary to make a decision as to whether to accept or reject these values as part of the sample. It may be desirable to discover whether a significant analysis of variance indicates an extreme value significantly different from the remainder. Also, the extreme value may differ significantly without causing a significant analysis of variance and it may be helpful to discover this. A method for choosing a suitable criterion for rejecting observations is developed.—*G. C. Carter*.

3537. Edwards, Allen L. (*U. Washington, Seattle.*) Statistical theory and research design. *Annu. Rev. Psychol.*, 1951, 2, 335-352.—The literature, with particular emphasis on research design, of the period June 1949 to May 1950 is reviewed under the major headings: research designs, analysis of variance, chi square, discriminant function, psychophysics and scaling, psychological testing, sampling, and computational techniques. 67-item bibliography.—*C. M. Louitt*.

3538. Godwin, H. J. (*University Coll. Swansea, Wales.*) On the estimation of dispersion by linear systematic statistics. *Biometrika*, 1949, 36, 92-100.—The efficiency of estimates of the standard deviation of a population which are obtained by ranking the observations of a sample and taking a linear combination of them is described. Only the case in which the same rule of combination is used for every sample of a given size is considered. The mean deviation from the mean, which takes different forms according to the position of the sample mean relative to the observations is excluded from the theory. The method used is to consider the first and second moments of differences of consecutive ranks. The most efficient linear systematic statistic and rectangular populations are discussed.—*G. C. Carter*.

3539. Huzurbazar, V. S. (*Fitzwilliam House, Cambridge, Eng.*) On a property of distributions admitting sufficient statistics. *Biometrika*, 1949, 36, 71-74.—A property of distributions admitting sufficient statistics is obtained, connecting the likelihood function of a sample of n observations, the maximum likelihood estimates of the parameters and the information matrix. A geometric meaning of the

property is given. The property is used in simplifying the calculations of the variances and covariances of the maximum likelihood estimates in large samples. It is shown that the likelihood equations have a unique solution for every sample of any size, and that the solution makes the likelihood function a maximum.—*G. C. Carter.*

3540. Kendall, M. G. On the reconciliation of theories of probability. *Biometrika*, 1949, 36, 101-116.—Few branches of scientific method have been subject to so much difference of opinion as the theory of probability. Even when we put aside numerous points of taste in presentation or axiomatization there remains a stubborn residual variance of viewpoint between different authorities. Everyone agrees that this is undesirable; nobody yet, I think, has dared to maintain that it is avoidable. There is nothing necessarily incompatible in the varying views which are currently held. The authorities are either saying the same thing in different ways or can only disagree because of avoidable latent differences in their premises or their field of discussion. It is contended that most authors have some of the right but that none has a monopoly on it. Mediation between the contestants is attempted.—*G. C. Carter.*

3541. Paull, A. E. (Grain Research Laboratory, Winnipeg, Manitoba, Can.) On a preliminary test for pooling mean squares in the analysis of variance. *Ann. math. Statist.*, 1950, 21, 539-556.—The consequences of performing a preliminary *F*-test in the analysis of variance are described. The use of the 5% or 25% significance level for the preliminary test results in disturbances that are frequently large enough to lead to incorrect inferences in the final tests is discussed. A more stable procedure is recommended for performing the preliminary test in which the two mean squares are pooled only if the ratio is less than twice the 50% point.—*G. C. Carter.*

3542. Quenouille, M. H. On a method of trend elimination. *Biometrika*, 1949, 36, 75-91.—It is suggested that trend might be eliminated by using a series of consecutive polynomials of the same degree. A method is given whereby the calculation can be rapidly carried out provided that the observations are circularly related. Ways of inducing circularity are given assuming that the differential coefficients at either end of the range of observations are equal, and it has been shown how any deviations from this assumption can be adjusted using a covariance analysis.—*G. C. Carter.*

3543. Tippett, L. H. C. *Technological applications of statistics*. New York: Wiley, 1950. ix, 189 p. \$3.50.—The 7 chapters of part I of this book are devoted to discussion of problems of quality control in industry with special emphasis on the devising and use of statistical control charts. In part II the 6 chapters are devoted to statistical analysis including the theory of errors, variance analysis, correlation, and the problems of planning investigations.—*C. M. Louttit.*

3544. Tukey, John W. (Princeton U., N. J.) Some sampling simplified. *J. Amer. statist. Ass.*, 1950, 45, 501-519.—Results in the theory of sampling from finite populations can be obtained very easily by working in terms of k 's. The single subscript k 's were introduced by R. A. Fisher. The multiple subscript appears to be a new development. The k 's have very simple general properties as regards sampling from one or more finite populations, and may be easily computed numerically. Applications are made here mostly to known results.—*G. C. Carter.*

3545. Walsh, John E. Some nonparametric tests of whether the largest observations of a set are too large or too small. *Ann. math. Statist.*, 1950, 21, 583-592.—A large number n of observations which are statistically independent and drawn from continuous symmetrical populations is considered. Some nonparametric tests of whether the r largest observations of the set are too large to be consistent with the hypothesis that these populations have a common median value are presented. Tests of whether the r largest observations are too small to be consistent with this hypothesis are also considered. r is a given integer which is independent of n . Subject to some weak restrictions, it is shown that the significance level of a test of the type presented as n increases. For no admissible value of n , however, does the significance level of this test exceed 2a.—*G. C. Carter.*

3546. Wishart, John. (U. Cambridge, England.) Cumulants of multivariate multinomial distributions. *Biometrika*, 1949, 36, 47-58.—The corresponding multivariate distributions of both the Bernoulli and Pascal kinds are considered with a view to deriving the appropriate cumulant recurrence relations. All of the different cumulants up to the fourth order are worked. A satisfactory notation is devised in order to identify and condense the formulae. The methods are illustrated by taking the simplest case of the bivariate binomial, first for the Bernoulli case and then for Pascal. The two variates are the numbers of successes in two events. By using the rules which are presented for the most general results of the second, third and fourth order, it is possible to conjecture similar results for higher order results.—*G. C. Carter.*

(See also abstract 4031)

REFERENCE WORKS

3547. Herskovits, Melville J. (Ed.) *International directory of anthropologists*. (3d ed.) Washington, D. C.: Committee on International Relations in Anthropology of the Division of Anthropology and Psychology, National Research Council, American Anthropological Association, 1950. xiv, 210 p. \$3.00.—Alphabetically arranged biographies of 2,123 professional anthropologists throughout the world.

3548. New York City. Welfare Council. Committee on Information Services. *Directory of social agencies of the city of New York 1950-1951*. New

York: Columbia University Press, 1950. xii, 513 p. \$5.00.—A directory of approximately 1100 social agencies arranged in 2 lists: In a classified list, agencies with addresses, telephone numbers, names of executives, and description of services are divided into 29 types of service; in an alphabetical list, legal titles, addresses, telephone numbers, and names of officers are given. In addition, there is a classified list of Directories of use to social workers and a personnel index.—A. J. Sprow.

3549. **New York Psychoanalytic Institute.** (247 East 82nd St., New York 28.) Report of the librarian of the Abraham A. Brill Library, November, 1949 to October, 1950. New York: Author, 1950. 23 p.—In this report by the librarian, Dr. Ilse Bry, there is described the development of this library with its special emphasis on psychoanalysis and closely related fields. Efforts are being made to develop an exhaustive collection of both historical and current psychoanalytic literature. The program of interlibrary cooperation in New York City for psychoanalysis, psychiatry, and psychology is reported.—C. M. Louttit.

ORGANIZATIONS

3550. **Chauncey, Henry.** ETS—the first three years. *Coll. Bd Rev.*, 1950, No. 12, 162-167.—The origin and subsequent development of the Educational Testing Service are described.—G. C. Carter.

3551. **Fuess, Claude M.** CEEB—the first fifty years. *Coll. Bd Rev.*, 1950, No. 12, 159-161.—The origin, historical development and major accomplishments of the College Entrance Examination Board are described.—G. C. Carter.

HISTORY & BIOGRAPHY

3552. **Alrapet'ians, E. SH., & Bykov, K. M.** Ivan Petrovich Pavlov. Moscow: USSR Acad. Sci., 1949. 177 p. 7 rub. 50 kop.—A complete bibliography of Pavlov's publications and an extensive list of Russian literature on Pavlov's life and works are presented along with a short sketch of Pavlov's scientific activity.—I. D. London.

3553. **Baumgarten-Tramer, Franziska.** Die experimentelle Psychologie und die Psychiatrie; eine historische Übersicht. (Experimental psychology and psychiatry; an historical survey.) *Schweiz. Arch. Neurol. Psychiat.*, 1950, 65, 1-19.—The history of the interrelationship and mutual assistance of experimental psychology and psychiatry is sketched by countries and the need for even closer ties is stressed. Over a century ago Johannes Müller set up the requirement: "Psychologus nemo nisi physiologicus." Today must a second requirement be added: "Medicus nemo nisi psychologus."—F. C. Sumner.

3554. **Dionesov, S. M.** Materialy k biografii Akademika Ivan Petrovicha Pavlova. (Biographical material on Ivan Petrovich Pavlov.) *Fiziol. Zh. SSSR*, 1949, 35, 614-621.—Data and reproductions of letters are presented which add to information

available on Pavlov during his University of Petersberg days.—I. D. London.

3555. **Ebaugh, Franklin G.** Memorial to past president: Adolf Meyer, M.D., 1866-1950. *Amer. J. Psychiat.*, 1950, 107, 288-290.—Obituary.

3556. **Frolov, Iu. P.** Ivan Petrovich Pavlov—vospominanija. (Ivan Petrovich Pavlov—recollections.) Moscow: USSR Acad. Med. Sci., 1949. 215 p. 9 rub.—The life of Pavlov is sketched and the author's personal recollections of Pavlov recorded. Present orientations in the USSR are incorporated in the book; thus lining Pavlov up on the side of the anti-Weismannists and Morganists, to cite one instance.—I. D. London.

3557. **Galdston, Iago.** Integrative psychiatry. *Bull. N. Y. Acad. Med.*, 1950, 26, 736-756.—This Annual Paul Schilder Memorial Lecture delivered at The New York Academy of Medicine on Feb. 23, 1950 gives a sketch of Paul Schilder's life and work. While identifying himself with psychoanalysis, Schilder had a perspective in psychiatry vastly larger than psychoanalysis. For Schilder every organism sets itself goals and strives for their attainment under conditions of a most varied kind and differing from individual to individual. Like the Meyerian approach, that of Schilder stresses the necessity on the part of the psychiatrist to know the whole personality in its total situation.—F. C. Sumner.

3558. **Heimann, Hans.** (U. Berne, Switzerland.) Der Einfluss von Karl Jaspers auf die Psychopathologie. (The influence of Karl Jaspers on psychopathology.) *Msch. Psychiat. Neurol.*, 1950, 120, 1-20.—The author sets forth the influence of Karl Jaspers in widely different branches of psychopathology and provides an introduction to those views of Jaspers most significant for psychopathologists. Major stress is placed on Jaspers' phenomenological position, his contrasting of understanding psychology (*Einfühlungspsychologie*) with explaining psychology, his criticism of Freud for misinterpreting his *Einfühlung* data in a quasi-natural science way, Jaspers' existential analysis, and his psychology of world-views.—F. C. Sumner.

3559. **Kaufmann, Walter A.** (Princeton U., N. J.) Nietzsche: philosopher, psychologist, anti-christ. Princeton, N. J.: Princeton University Press, 1950. xi, 409 p. \$6.00.—The Nietzsche legend, fashioned by his sister Elisabeth Förster and adopted by the Nazi, is a distortion of his philosophy. The present author critically examines all of Nietzsche's works and reinterprets them as parts of a total philosophical system. The "will to power," ultimately the basic concept of the philosophy, is for Nietzsche the basic drive to self-realization and does not refer to wars or personal aggrandizement. 10-page bibliography.—C. M. Louttit.

3560. **Steck, H.** Commémoration de la naissance d'Auguste Forel. (Commemoration of the birth of Auguste Forel.) *Schweiz. Arch. Neurol. Psychiat.*, 1950, 65, 421-425.—The life and contributions of Auguste Forel, founder of Swiss psychiatry, are

recalled on the occasion of the hundredth anniversary of his birth.—*F. C. Sumner.*

(See also abstracts 3721, 3789)

PROFESSIONAL PROBLEMS OF PSYCHOLOGY

3561. Ebaugh, Franklin G. (*U. Colorado Med. Center, Denver.*) Graduate teaching of psychiatry through individual supervision. *Amer. J. Psychiat.*, 1950, 107, 274-278.—"The value of a training program in psychiatry is directly dependent on the goals and the effectiveness of the psychiatric practice of the institution that conducts it, since training is primarily a supervised apprenticeship experience for which no amount of exclusively didactic work can substitute." The author feels that a residency under good supervision can lead to the three essentials of success in treatment: "the acquisition of knowledge, an understanding of the patient-physician relationship, and a development of self-awareness in the student."—*R. D. Weitz.*

3562. Graham, Francis W. (*Melbourne (Australia) Clinic for Psychoanalysis.*) Post-graduate training in psychiatry. *Med. J. Australia*, 1949, 2, 121-123.—Stress is placed upon the need of post-graduate training in psychiatry or psychological medicine which will require evidence of ability or capacity for psychotherapy through skill in changing the workings of a person's mind and in modifying his personality and perhaps character. Two universities in Australia namely, those of Melbourne and Sydney, give diplomas in psychological medicine and for them require a good working knowledge of clinical psychology and related subjects, psychology, neurology, neuropathology, physiology, psychopathology. But it should be remembered that the possessing of a diploma of psychological medicine is no indication of ability or capacity for psychotherapy, any more than the degree of bachelor of surgery indicates excellence as a surgeon.—*F. C. Sumner.*

3563. Haun, Paul. Psychiatry and the ancillary services. *Amer. J. Psychiat.*, 1950, 107, 102-109.—The author discusses the importance of social work and psychology to medicine. He maintains no professions can answer all needs, each must define its functions and direct its efforts in the direction of its professional responsibility. The author offers nine of his personal principles and beliefs upon which medicine rests, with the hope they will be further elaborated upon.—*R. D. Weitz.*

3564. Kennedy, John L. (*Tufts Coll., Medford, Mass.*), & Bussey, Ruth Cruikshank. Personnel resources for research in applied experimental psychology. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 517-518.—The authors make an estimate of professional manpower available for work in the type of experimental psychology dealt with in this volume. They conclude that there are not more than 100 psychologists fully qualified for this work and they propose that a special training program be prepared for training people in this field.—*C. M. Louttit.*

3565. May, Rollo. The work and training of the psychological therapist. *Psychol. Serv. Center J.*, 1950, 2(1), 23 p.—The author discusses the function and training of the psychological therapist. He thinks that "competence to do therapy does not lie essentially in the possession of an academic degree in medicine (or in psychology for that matter), but rather in having the particular training that arises from the understanding of the nature of neurotic problems." Neurotic, or emotional problems, he states, have their source in the person's methods of relating to himself and to other people in his environment. He feels that the value of licensing and certification of psychologists will depend on "how accurately their criteria reflect the internal characteristics of psychological work with people."—*H. Feifel.*

(See also abstracts 4046, 4078, 4097)

PHYSIOLOGICAL PSYCHOLOGY

3566. Beritov, I. S. *Obshchaya fiziologiya myshechnol i nervnol sistem.* (General physiology of the muscular and nervous systems.) Vol. II. Moscow: USSR Acad. Sci., 1948. 640 p. 45 rub.—The subject of this "theoretical and practical textbook" is the general physiology of the spinal cord and brain stem and the general physiology of the cerebral cortex. 21 chap. are devoted to the former; 12 to the latter, which is oriented around the author's conception of the "individual reflex." Most chapters close with a "practicum."—*I. D. London.*

3567. Bevan, William, Jr.; Lewis, George T., Bloom, Walter L., & Abess, Allan T. (*Emory U. Med. Sch., Ga.*) Spontaneous activity in rats fed an amino acid-deficient diet. *Amer. J. Physiol.*, 1950, 163, 104-110.—Ten young rats were placed for 125 days (21 hrs. per da.) in rotating drum activity cages. The five fed a diet "deficient in lysine and probably other amino acids," showed no weight (growth) gain; lower hemoglobin concentration; in general, higher activity levels with cycles of activity, and less food and water intake than the five maintained on normal diets.—*R. B. Bromiley.*

3568. Birren, James E. Motion sickness: its psychophysiological aspects. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 375-398.—The physiological factors in, and psychological aspects of, motion sickness are reviewed. There is also reported a questionnaire study of naval personnel concerning frequency of motion sickness. 121-item bibliography.—*C. M. Louttit.*

3569. Darrow, Chester W. (*Institute for Juvenile Research, Chicago, Ill.*), & Henry, Charles E. Psychophysiology of stress. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 417-439.—Submarines present unavoidable rigors subjecting men to severe psychological and physiological stresses. The nature of particularly the physiological stress conditions is reviewed. Methods of measuring stress and of reactions thereto are summarized.

There is a brief discussion of psychological aspects. 102-item bibliography.—*C. M. Louittit.*

3570. Deese, James, & Morgan, Clifford T. (*Johns Hopkins U., Baltimore, Md.*) Comparative and physiological psychology. *Annu. Rev. Psychol.*, 1951, 2, 193-216.—Literature between June 1949 and May 1950 is reviewed under the major headings: sensory capacities, learning and behavioral capacity, nervous system and behavior, convulsive behavior, chemicals and behavior. 136-item bibliography.—*C. M. Louittit.*

3571. Griffiths, W. J., Jr., & Wolfe, John B. (*U. Mississippi, University.*) An easy way to produce convulsions in rats: carbon disulfide. *J. comp. physiol. Psychol.*, 1950, 43, 416-417.—Inhalation of carbon disulfide was found to produce typical grand mal seizures in both albino and wild Norway rats. Control tests showed that the seizure did not depend upon odor or tactile stimulation nor could seizures be induced by intraperitoneal injection or feeding by stomach tube.—*L. I. O'Kelly.*

3572. Hansen, Karen Marie. (*Rigshospitalet, Copenhagen, Denmark.*) Studies made for the end of finding an objective expression of the influence of magnetism on man and of ascertaining whether this influence is carried by way of the autonomic nervous system. *Acta med. scand.*, 1949, 135, 448-457.—Using an electromagnet, an aluminum block of same size, and histamine puncture on 25 young healthy men and women, the author studied the influence of magnetism in the infrascapular regions in terms of red flares in the skin produced by the puncture 2, 5, 10, and 15 minutes after puncture had or had not been previously treated with histamine. The experiments show on the whole that when magnetism is involved, something happens which can not be due to anything but the influence of magnetism. The author advances the hypothesis that magnetism first "irritates" the parasympathetic system and then reduces its irritability.—*F. C. Sumner.*

3573. Herrington, L. P. (*Yale U., New Haven, Conn.*), & Hardy, J. D. Temperature and humidity in relation to the thermal interchange between the human body and the environment. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 269-309.—Primary facts of human heat production are surveyed in relation to basic physical laws governing thermal interchange with the environment. Physiological mechanisms that achieve temperature regulation of the human body are described. Data to illustrate the variation of physiological stress and subjective comfort in different regions of temperature exposure and with different levels of heat production are presented. Basic equations of physiological heat exchange illustrate the methods employed in analyzing the physiological adjustments and in assessing the combined thermal effect of environment. Utilitarian standards relating to comfort and the thermal efficiency of clothing are discussed. There is a forward on the habitability of submarines by Eugene F. DuBois. 47-item bibliography.—*C. M. Louittit.*

3574. Holmes, Joseph H., & Gregersen, Magnus L. (*Columbia U. Coll. Physicians & Surgeons, New York.*) Observations on drinking induced by hypertonic solutions. *Amer. J. Physiol.*, 1950, 162, 326-337.—Dogs vary widely in the amount of water drunk in response to intravenously injected NaCl but individually their responses on repeated tests are constant. "The amount of water ingested is apparently not determined by the amount required to dilute the injected salt to isotonicity. . . . Denervation of the stomach did not appear to modify the drinking response."—*R. B. Bromiley.*

3575. Holmes, Joseph H., & Gregersen, Magnus L. (*Columbia U. Coll. Physicians & Surgeons, New York.*) Role of sodium and chloride in thirst. *Amer. J. Physiol.*, 1950, 162, 338-347.—The conclusion that "thirst is not specifically dependent upon nor governed by the level of sodium or chloride in the blood" is reached upon the comparison, following intravenous injection of NaCl, of serum sodium and serum chloride levels in the blood and drinking responses of dogs.—*R. B. Bromiley.*

3576. Lacey, John I. (*Fels Research Inst., Yellow Springs, O.*) Individual differences in somatic response patterns. *J. comp. physiol. Psychol.*, 1950, 43, 338-350.—From analysis of blood pressure, palmar conductance and heart-rate data secured on pregnant women subjected to a mild psychological stress situation, the writer tests "the hypothesis that individuals exhibit characteristic and persistent patterns of somatic response to stress." Results indicate "organized patterns of somatic reaction to stress which are reliable over a period of time extending up to about three hundred days, . . . patterning of somatic reaction is a variable as important as, possibly more important than, average reactivity itself."—*L. I. O'Kelly.*

3577. Lorber, Stanley H., Komarov, S. A., & Shay, Harry. (*Temple U. Sch. Med., Philadelphia, Pa.*) Effect of sham feeding on gastric motor activity of the dog. *Amer. J. Physiol.*, 1950, 162, 447-451.—"Twenty observations were made on the effect of sham feeding on gastric motor activity of dogs having a gastric fistula and an esophagotomy. . . . The immediate motor effects were correlated with preceding activity but subsequent or final effects were usually constant irrespective of preceding motility. The final and predominant effects of sham feeding on gastric motility were cessation of peristaltic waves, increase in fundal tonus and decrease in antral tonus, lasting at least as long as the secretory response. These effects preceded the secretory response by 3 to 10 minutes."—*R. B. Bromiley.*

3578. Maqsood, M., & Reineke, E. P. (*Michigan State Coll., East Lansing.*) Influence of environmental temperatures and thyroid status on sexual development in male mouse. *Amer. J. Physiol.*, 1950, 162, 24-30.—"Mild hyperthyroidism depresses sexual development in the growing male mouse at environmental temperatures of 24° and 30°C."—*R. B. Bromiley.*

3579. Morales, Manuel F. (U. Chicago, Ill.) Motion sickness: physical considerations regarding its etiology. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 399-414.—The measurement of motion of naval vessels and the relation of such motion to the mechanics and neural response of receptor systems are discussed. 42-item bibliography.—C. M. Louttit.

3580. Nichols, John. (U. North Carolina, Chapel Hill.) Effects of captivity on adrenal gland of wild Norway rat. *Amer. J. Physiol.*, 1950, 162, 5-9.—In the natural state the adrenal glands of the wild Norway rat are twice the size and the cholesterol content is twice as concentrated as that of the domestic rat. Immediately upon capture the gland undergoes hypertrophy with loss of cholesterol; within 24 hours the concentration has returned to normal, but the gland does not return to normal size until after some ten weeks of captivity.—R. B. Bromiley.

3581. Pfeiffer, John. Genetics—the science of heredity. *Publ. Affairs Pamphl.*, 1950, No. 165, 32 p.—A brief, non-technical discussion of the science of genetics from the work of Gregor Johann Mendel to Lysenko.—M. A. Seidenfeld.

3582. Ramey, E.; Goldstein, M. S., & Levine, R. (U. Chicago, Ill.) Mechanism of muscular fatigue in adrenalectomized animals. *Amer. J. Physiol.*, 1950, 162, 10-16.—Since there appeared to be no difference in the time course of fatigue in strips of muscle removed from normal and adrenalectomized rats while suffering from muscular exhaustion, "It is postulated that the well established easy fatigability of the muscles of adrenalectomized animals *in vivo* is probably due to a failure of neuro-circulatory adaptation."—R. B. Bromiley.

3583. Sellers, E. A., & You, S. S. (U. Toronto, Can.) Role of the thyroid in metabolic responses to a cold environment. *Amer. J. Physiol.*, 1950, 163, 81-91.—Two weeks exposure to cold ($1.5^{\circ} \pm 1^{\circ}\text{C}$) produces in adult rats a chronic increase in metabolic rate as measured at 30°C . The effects of anesthetics, thyroidectomy with and without replacement therapy, and other biochemical manipulations were such that "it is postulated that the increase in metabolic rate . . . does not depend on a hyperthyroid state but does depend on the presence of thyroid hormone."—R. B. Bromiley.

3584. Tromp, S. W. (Fouad I U., Cairo, Egypt.) Psychical physics: a scientific analysis of dowsing, radesthesia and kindred divining phenomena. Amsterdam: Elsevier Publ. Co., 1949. (N. Y.: Interscience Publishers.) xv, 535 p. \$8.00.—The author reviews in detailed outline form the electromagnetic phenomena of living organisms, the earth, and the atmosphere. He reasons that divining phenomena may be inferred on theoretical grounds. Experiments are reported (pp. 310-330) on the reactions of divining rods in magnetic fields. The reactions are shown to be the immediate result of muscular movements in the dowsers hand and arm.

Also skin resistance is apparently related to successful use of the rod. 1496-item bibliography.—C. M. Louttit.

3585. von Buddenbrock, W. (U. Mainz, Germany.) *Vergleichende Physiologie. Band IV: Hormone*. (Comparative physiology. Volume IV: Hormone.) Basel: Verlag Birkhäuser, 1950. 492 p.—The literature is reviewed on the physiological effects of the internal secretions of thyroid, pancreas, adrenals, parathyroids, thymus, epiphysis, gonads, and hypophysis in vertebrate animals and on the physiological effects of the sexual, gonadotropic, skin-shedding, and metamorphic hormones in invertebrates.—F. C. Sumner.

(See also abstracts 3523, 3525, 3653, 3665)

NERVOUS SYSTEM

3586. Anokhin, P. K. (Ed.) *Problemy vysshei nervnoi deiatel'nosti*. (Problems of higher nervous activity.) Moscow: Akad. Med. Nauk SSSR, 1949. 690 p. 53 r.—In this collection of papers are presented reports of experimental and theoretical work of the Institute of Physiology on higher nervous activity. The papers are presented under four general topics: (1) the physiological mechanisms of the conditioned reflex, (2) secretory-motor conditioned responses under circumstances of "active choice," (3) the physiological structure of complex forms of higher nervous activity, and (4) the role of the cortical lobes in integration of higher nervous activity. Preceding these papers is an extensive discussion on the key problems in study of higher nervous activity.—I. D. London.

3587. Anokhin, P. K. *Uzlovyye voprosy v izuchenii vysshei nervnoi deiatel'nosti*. (The key questions in the study of higher nervous activity.) In *Anokhin, P. K., Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 9-128.—The following key questions in the study of higher nervous activity are discussed: (1) the unconditioned reflex as an integrated phenomenon of the nervous system, (2) the conditioned reflex as a whole reaction of the animal, (3) the "physiological architecture" of emotions and their place in the development of conditioned reactions, (4) the "secretory-motor method" in the study of complex forms of higher nervous activity, (5) the problem of localization of conditioned reflex activity in the central nervous system, and (6) the role of the frontal divisions of the cerebral cortex in the integration of the processes of higher nervous activity. It is submitted that, while certain Pavlovian conceptions still remain fundamental, others must be put aside or modified.—I. D. London.

3588. Chang, Hsiang-Tung. (Yale U. Sch. Med., New Haven, Conn.) The repetitive discharges of corticothalamic reverberating circuit. *J. Neurophysiol.*, 1950, 13, 235-257.—Most of these experiments were done on cats under Nembutal with monopolar cathode ray recording. Following afferent stimulation there is a primary sensory cortex response that is followed by a series of 3-13 rhythmic

waves. All sensory systems show this response; frequency rates are somewhat different but are of the order of 10/sec. These repetitive discharges are independent of stimulus strength, vary with depth of anesthesia, and are different from the spontaneous cortical activity. Similar patterns are recorded from corresponding thalamic structures; while the massa intermedia is not involved they are eliminated by appropriate lesions in cortex or thalamus. Data from paired stimuli indicate that these repetitive discharges, which result from activity in a corticothalamic reverberating circuit, do not depend on the same neurons as those carrying the primary afferent volley.—C. E. Henry.

3589. Chang, Hsiang-Tung, & Kaada, Birger. (Yale U. Sch. Med., New Haven, Conn.) An analysis of primary response of visual cortex to optic nerve stimulation in cats. *J. Neurophysiol.*, 1950, 13, 305-318.—The primary response in deeply Nembutalized cats is a complex of 6 separate deflections. From the changes induced by the experimental variables of stimulus strength, novocaine, mechanical pressure, strychnine, and anoxia it appears that the 5th deflection is due to a purely cortical event probably involving Golgi type II cells in the 4th layer. The sixth deflection may also be cortical in origin indicating impulse passage in apical dendrites of pyramids and other internuncial cells. Deflectors 2, 3, & 4, with a maximum latency of 3.3 msec., are related to the activity of 3 systems of geniculocortical neurons which in turn may be related to trichromatic vision.—C. E. Henry.

3590. Chapman, William P., Rose, Augustus S., & Solomon, Harry C. (Massachusetts General Hosp., Boston.) A follow-up study of motor withdrawal reaction to heat discomfort in patients before and after frontal lobotomy. *Amer. J. Psychiat.*, 1950, 107, 221-224.—13 postoperative frontal lobotomy patients were exposed to the modified Hardy-Wolff Goodell pain threshold apparatus using a 1000 watt Mazda lamp as the source of heat stimulus. Results indicated that decreased tolerance to heat discomfort during first year after operation probably represented only a temporary change. The motor reaction pattern tends to return to preoperative levels during the second postoperative year.—R. D. Weitz.

3591. Dunsmore, Rembrandt H., & Lennox, Margaret A. (Yale U., New Haven, Conn.) Stimulation and strychninization of supracallosal anterior cingulate gyrus. *J. Neurophysiol.*, 1950, 13, 207-214.—Physiological neuronography on cats and monkeys confirms the projection of the anterior cingulate gyrus to areas 31, 32, 6a, & 4s; strychnine spikes were also conducted to (presumably) 8s, 2s, & 19s. Electrical stimulation yielded the following independent effects: atypical motor movements; arrest of motor movements; respiratory arrest; EEG changes. These latter showed independently as ipsilateral suppression of spindles and of strychnine spikes, bilateral suppression of spontaneous activity, and ipsi- & bilateral seizure discharges. The data suggest such effects are mediated by independent

pathways, probably via the caudate nucleus.—C. E. Henry.

3592. Fol'bort, G. V. Profsessy utomleniâ i vosstanovleniâ v nervnoi sisteme i ikh znachenie dlia ponimaniâ patologicheskikh sostoiâni. (The processes of fatigue and restoration in the nervous system and their significance for the understanding of pathological states.) *Fiziol. Zh. SSSR*, 1949, 35, 609-613.—The confluence of fatiguing and regenerating processes results in a disturbance of their "proper balance" over a more or less prolonged period of time. "The community of the functional characteristics of the processes of excitation and inhibition with those of exhaustion and restoration" is held to be confirmed by the analysis of a variety of experimental data.—I. D. London.

3593. Gellhorn, E., & Ballin, H. M. (U. Minnesota, Minneapolis.) Further investigations on effect of anoxia on convulsions. *Amer. J. Physiol.*, 1950, 162, 503-506.—Moderate degrees of anoxia increase the susceptibility of normal and anesthetized rats to electroshock-induced convulsions. Severe anoxia reduces the susceptibility.—R. B. Bromiley.

3594. Kas'ianov, V. M. Tormozit li bezuslovny razdrazhitel' korkovye kletki, k kotorym adresuetsia uslovny razdrazhitel'? (Does the unconditioned stimulus inhibit the cortical cells, to which the conditioned stimulus is directed?) In *Anokhin, P. K., Problemy vysshei nervnoi deiatelnosti*, (see 25: 3586), 163-173.—The cerebral cortex during application of the unconditioned stimulus is not in an inhibitory state and is capable of reacting to new stimuli. Experiments show that cortical elements are ready at any time for new associative activity. This is true as regards even previously conditioned stimuli.—I. D. London.

3595. Kennard, Margaret A. (U. Oregon Med. Sch., Portland.) Chronic focal hyper-irritability of sensory nervous system in cats. *J. Neurophysiol.*, 1950, 13, 215-222.—Alumina cream was injected into the subarachnoid space in the dorsal spinal cord of 19 cats. All developed chronic and fairly focal hyperirritability over a period of days to weeks and persisting throughout a nine months period of observation. The hyperirritability first develops near site of injection with subsequent spread in either direction. While pain, heavy and light touch stimuli all appear to be painful, the latter is especially so. Other than hyper-reflexia there is no change in motor status; proprioception is normal. The effect is similar to that produced by alumina cream on motor cortex and is reminiscent of the causalgic state in man.—C. E. Henry.

3596. Kupalov, P. S. O mekhanizma professa uslovnogo vozbuždeniâ. (On the mechanism of the process of conditioned excitation.) *Fiziol. Zh. SSSR*, 1949, 35, 582-586.—The results of experimental studies on the organization and mechanism of the process of conditioned excitation are presented and discussed in the light of Kupalov's concept of the "shortened" conditioned reflex where the response to the stimulus is not in external evidence

but in the brain. In accordance with this concept, the formation, within the cerebral cortex, of "closed, recurrently excited, circular neural pathways" is taken as the conditioned response.—I. D. London.

3597. Laptev, L. I. Bioelektricheskie явления в язычном нерве при механических и температурных воздействиях, приложенных к вкусовой поверхности языка. (Bioelectric phenomena in the lingual nerve with mechanical and hot and cold stimulation applied to the gustatory surface of the tongue.) In Anokhin, P. K., *Problemy vysshel nervol deiatel'nosti*, (see 25: 3586), 131-146.—Potentials of large voltage are produced with mechanical stimulation of the lingual nerve. With continuous pressure the intensity at first ranges from 50-60 μ V, but quickly drops to from 20-30 μ V. Mechanical stimulation, simultaneous with other stimulation of moderate intensity applied to the tongue, shows up as clearly on the oscillogram as when applied in isolation. The bioelectric effect of thermal stimulation does not appear in all fibers of the lingual nerve.—I. D. London.

3598. Mosinger, Michel. Anatomie de l'hypothalamus et du sous-thalamus élargi (Cytoarchitectonie, voies de conduction, histo-physiologie). (Anatomy of the hypothalamus and of the extended subthalamus (Cytoarchitectonic, conduction paths, histo-physiology).) *Schweiz. Arch. Neurol. Psychiat.*, 1950, 65, 135-186.—The anatomy and function of the hypothalamus and subjacent structures are set forth in detail with 18 histological figures. The hypothalamus appears to be principal center of the organism in the vegetative reaction of neurosomatic origin.—F. C. Sumner.

3599. Orbeli, L. A. Adaptafisjionno-troficheskaiā rol' simpaticheskoi nervol sistemy i mozzhechka i vysshaiā nervnaiā deiatel'nosti. (Higher nervous activity and the adaptive-trophic role of the sympathetic nervous system and cerebellum.) *Fisiol. Zh. SSSR*, 1949, 35, 594-595.—A short account is presented of the development of research on the adaptive-trophic role of the sympathetic nervous system and cerebellum in higher nervous activity.—I. D. London.

3600. Shumilina, A. I. Funktsional'noe znachenie lobnykh oblastei kory golovnogo moza v uslovno-reflektornoi deiatel'nosti sobak. (The functional significance of the frontal areas of the cortex of the brain in conditioned reflex activity of the dog.) In Anokhin, P. K., *Problemy vysshel nervol deiatel'nosti*, (see 25: 3586), 561-627.—Extirpation of the frontal cortex in dogs, in whom automatized conditioned "secretory-motor" reactions have been developed by means of "two-sided" reinforcement, does not cause essential changes in conditioned secretion. However, the operation leads to disintegration of motor behavior with the appearance of to-and-fro running from one feed trough to the other—behavior which is independent of the action of the conditioned stimulus, appearing immediately as the animal is placed in the experimental apparatus. The above behavior is not observed in animals

deprived of only the sensorimotor or parietal zones. The conclusion is drawn that "with extirpation of the frontal areas the ability to integrate the various afferent influences," which stem from the complex of external stimuli, "is destroyed."—I. D. London.

3601. Shumilina, A. I. Morfo-fiziologicheskii analiz lokalizatsii motornogo vozbuždeniā v korykvykh i podkorkovykh strukturakh golovnogo mozga. (Morpho-physiological analysis of localization of motor excitation in the cortical and subcortical structures of the brain.) In Anokhin, P. K., *Problemy vysshel nervol deiatel'nosti*, (see 25: 3586), 299-305.—After extirpation of major portion of left hemisphere of a dog, a steady conditioned defensive reaction, involving left fore and right hind legs, was formed. Several months later the right rear leg was deafferented. On the 5th day after deafferentiation the conditioned reaction disappeared altogether. On the 7th day it appeared in the form of local reactions in the fore leg with no restlessness. On the 11th day the rear leg responded. On the 12th day the dog again exhibited restlessness, and the conditioned response was accompanied, as before, by a "stormy general reaction." The conclusion is drawn that "the general excitation, accompanying the local process, is formed basically in the subcortical field, probably, in the *corpus striatum* and *formatio reticularis*, from which the excitation spreads with great rapidity along the spinal chord."—I. D. London.

3602. Shumilina, A. I. Ob uchastii piramidnoi i ekstrapiramidnoi sistem v motornoi deiatel'nosti deafferentirovannoi konechnosti. (On the participation of the pyramidal and extrapyramidal systems in motor activity of a deafferented limb.) In Anokhin, P. K., *Problemy vysshel nervol deiatel'nosti*, (see 25: 3586), 196-207.—The conditioned defensive reaction of a deafferented right rear limb of a dog, formed in the course of developing it for the opposite fore limb, does not diminish after extirpation of the cortical sensorimotor zone. The special character of this reaction is preserved under complete destruction of the pyramidal pathways. The conclusion is drawn that the conditioned motor reflex is an organic complex of cortical and subcortical excitations which are organized as an integral whole during the first fractions of the second which marks the beginning of action by the conditioned stimulus.—I. D. London.

3603. Shumilina, A. I. Osobennosti vyrabotki uslovnnykh sekretorno-dvigatel'nykh reaktsii u sobak posle udaleniiā lobnykh oblastei kory golovnogo mozga. (Features of the production of conditioned secretory-motor reactions in dogs after removal of the frontal areas of the cortex of the brain.) In Anokhin, P. K., *Problemy vysshel nervol deiatel'nosti*, (see 25: 3586), 628-652.—The removal of the frontal cortex does not deprive the dog of the ability to form conditioned reactions involving place of reinforcement (where the method of "active choice" is employed). With reinforcement on only one side of the two-sided apparatus, to-and-fro

running from one trough to the other does not occur in spite of heightened motor activity outside the chamber. On going over to two-sided reinforcement, however, immediately after eating from the opposite trough the animal is seen occasionally to run from one trough to the other. The amount of to-and-fro running increases after each reinforcement, until by the end of the experiment he is in constant such motion.—I. D. London.

3604. Shumilina, A. I. Peredelka aktivnogo vybora storon bezuslovnogo podkrepleniia, vyrobannogo do udalenii lobnykh oblastei kory golovnogo mozga u sobaki. (Alteration of active choice of sides of unconditioned reinforcement, developed before removal of frontal areas of the cerebral cortex in the dog.) In *Anokhin, P. K., Problemy vysshel nervnoi deiatel'nosti*, (see 25: 3586), 653-673.—On removal of frontal areas of cortex in dogs, change of place of reinforcement leads to a sharp and protracted lowering of excitability of the central nervous system and inhibits previously conditioned motor reactions for very long periods of time. The "disintegration" of previously automatized "active choice" becomes apparent in operated dogs not earlier than a year after change of sides of reinforcement and lasts for 2 years. Along with this one finds absent the orientive-investigatory reactions which intact dogs always exhibit under change of experimental conditions. There is no significant difference in the alteration of conditioned motor reactions associated with the auditory and visual analyzers. After change of sides of reinforcement the conditioned secretion is depressed for 3 years, undergoing cyclic changes.—I. D. London.

3605. Shumilina, A. I. Peredelka aktivnogo vybora storon bezuslovnogo podkrepleniia, vyrobannogo posle udalenii lobnykh oblastei kory golovnogo mozga. (Alteration of active choice of sides of unconditioned reinforcement, developed after removal of the frontal areas of the cerebral cortex.) In *Anokhin, P. K., Problemy vysshel nervnoi deiatel'nosti*, (see 25: 3586), 674-688.—Change of place of reinforcement, when "active choice" has been developed after removal of the premotor zones, brings about a restructuring of the conditioned motor reactions corresponding to the new signification of the conditioned stimuli.—I. D. London.

3606. Stroganov, V. V. Vzaimnaia induktsiia i napravlenie nervnykh professosov v kore bol'shikh polusharil. (Mutual induction and stress of nervous processes in the cortex of the cerebral hemispheres.) *Fisiol. Zh. SSSR*, 1949, 35, 604-608.—The concept of "stress of nervous process," defined as "degree of development of a component of opposite sign in a given nervous process," is held to illuminate more fully the experimental data gathered by the Pavlovian school.—I. D. London.

3607. Summa, Kaspar. (U. Berne, Switzerland.) Zur Cytoarchitektonik des menschlichen Centrum medianum thalami. (On the cytoarchitectonic of the human Centrum medianum thalami.) *Mschr.*

Psychiat. Neurol., 1950, 120, 119-131.—A detailed description is given of the cytoarchitectonic of the median central nucleus of the thalamus in man. Individual variation of large range is not so much in form and cell structure as in cell density and distribution—a point which has been insufficiently noted.—F. C. Sumner.

3608. Thompson, J. M., Woolsey, C. N., & Talbot, S. A. (Johns Hopkins U., Baltimore, Md.) Visual areas I and II of cerebral cortex of rabbit. *J. Neurophysiol.*, 1950, 13, 277-288.—Under deep pentobarbital sodium the visual cortex of the rabbit responds to gross cortical stimulation with typical surface positive waves. The contralateral projection is more posteriorly to include the tentorial aspect. The vertical meridian for binocular vision is 20° lateral to the sagittal plane; its cortical projection with localized photic stimulation divides the visual area into two mirrored portions. The larger and posteromedial of these is visual area I while the smaller and more anterolateral area is visual area II. The lateral visual field projects to more than 150°, the upper to about 15° and the lower to more than 20°.—C. E. Henry.

3609. Tunturi, Archie R. (U. Oregon Med. Sch., Portland.) Physiological determination of the arrangement of the afferent connections to the middle ectosylvian auditory area in the dog. *Amer. J. Physiol.*, 1950, 162, 489-502.—"By the method of strychnizing small patches of the cortex [of dogs] and testing with tones, the arrangement of the afferent connections to the middle ectosylvian area of the auditory cortex has been determined. The fibers for each frequency terminate in a band no wider than 0.2 mm. and 5 to 7 mm. in length extending transversely across the gyrus. In the anterior-posterior direction the bands are arranged as a series of parallel strips with a spacing of 2 mm. per octave over the frequency range between 250 and 8000 cps. . . ."—R. B. Bromiley.

3610. Volkova, I. N., & Kibkiaov, A. V. O gumoral'noi perenosimosti tormozhenii v spinnom mozgu liagushki. (On humoral transferability of inhibition in the spinal cord of the frog.) *Fisiol. Zh. SSSR*, 1949, 35, 380-383.—A method of spinal perfusion is described for application to the frog. Perfused material, collected during the development of inhibition in spinal centers, on reintroduction into the spinal vascular net causes inhibition of reflex reactions. The process of inhibition as well as the process of excitation is accompanied by the freeing of a specific active principle.—I. D. London.

3611. Wiersma, C. A. G., & Turner, R. S. (California Inst. Tech., Pasadena.) The interaction between the synapses of a single motor fiber. *J. gen. Physiol.*, 1950, 34, 137-145.—"It has been shown that stimulation of synapses of the giant motor fibers of the third roots of *Cambarus clarkii* can block transmission at other synapses located on the same fiber. Peripherally located synapses block most synapses which are more centrally located. The reverse is true in a small number of cases. . . .

It is further found that the two medial fibers in fresh, carefully dissected fibers show a functional connection in the brain. It is probable that under the natural conditions both medial and giant fibers are always active at the same time."—S. S. Marzof.

3612. Zaikina, M. G. К вопросу об efferentnykh funktsiakh zadnikh koreshkov. Soobshchenie I. Rol'zadnikh koreshkov v simpaticheskem fenomene Orbeli-Ginefinskogo u kholodnokrovnykh. (On the efferent function of the dorsal roots. Report I. The role of the dorsal roots in the sympathetic phenomenon of Orbeli-Ginefinskii in cold-blooded animals.) *Fiziol. Zh. SSSR*, 1949, 35, 384-389.—Deprivation of dorsal root innervation of the extremities in the frog by means of extirpation of the spinal ganglia 1-2 months before experimentation excludes the possibility of exhibiting the Orbeli-Ginefinskii phenomenon, whereby "preliminary stimulation of the sympathetic nerve increases tonomotor effects." Rapid tetanic stimulation of the sciatic nerve against the background of single stimulations of the ventral roots causes an increase in magnitude of the following single contractions of fatigued nerves with intact innervation, but not in muscles, deprived of dorsal root innervation. The change in the functional properties of the skeletal musculature after exclusion of dorsal root innervation depends on the elimination of antidromic influence on the part of those nerve fibers, demonstrated to have significance in muscle activity.—I. D. London.

3613. Zaikina, M. G. К вопросу об efferentnykh funktsiakh zadnikh koreshkov. Soobshchenie II. Vliyanie zadnikh koreshkov na techenie simpaticheskogo fenomena Orbeli-Ginefinskogo u teplokrovnykh. (On the efferent functions of the dorsal roots. Report II. The influence of the dorsal roots on the course of the sympathetic phenomenon of Orbeli-Ginefinskii in warm-blooded animals.) *Fiziol. Zh. SSSR*, 1949, 35, 390-396.—Under usual conditions stimulation of the dorsal roots does not show an influence on the mechanical reaction of skeletal muscles. However, stimulation of sympathetic nerves prior to stimulation of the dorsal roots, under certain conditions, does create a background for the appearance of effects resulting from dorsal root stimulation. Dorsal root nerve fibers can exhibit antidromic influence on the functional properties of skeletal muscles.—I. D. London.

(See also abstract 3685)

RECEPTIVE AND PERCEPTUAL PROCESSES

3614. Pfaffmann, Carl. (Brown U., Providence, R. I.) Somesthesia and the chemical senses. *Annu. Rev. Psychol.*, 1950, 2, 79-94.—The literature of 1949-1950 on somesthesia (incl. pain), smell and taste is reviewed. About half of the material is on somesthesia which the reviewer divides into afferent and central processes, pain, and sensory extinction

following parietal damage. 88-item bibliography.—C. M. Louttit.

3615. Richter, Curt P. (Johns Hopkins Hosp., Baltimore, Md.) Taste and solubility of toxic compounds in poisoning of rats and man. *J. comp. physiol. Psychol.*, 1950, 43, 358-374.—A study of 11 toxic compounds showed no relationship between solubility in water and taste either for man or rat. Ability to taste these poisons was highly correlated between rats and man. Rats accepted four of the poisons in spite of their ability to detect the substances in dilute solution. 29 references.—L. I. O'Kelly.

3616. Sperry, R. W. (U. Chicago, Ill.) Neural basis of the spontaneous optokinetic response produced by visual inversion. *J. comp. physiol. Psychol.*, 1950, 43, 482-489.—Using *Sphaeroides spengleri* (Bloch), the southern swell-fish, visual inversion of one eye was secured by 180° surgical rotation. The other eye was blinded. Visual inversion was accompanied by forced circling movements, which survived bilateral ablation of the forebrain, the cerebellum, or the inferior lobes of the infundibulum. Circling was not eliminated by bilateral labyrinthectomy and severance of the extraocular muscles, but was abolished if the eye was returned to its normal orientation, and if the optic lobe of the rotated eye was removed.—L. I. O'Kelly.

3617. USSR Akademii Nauk. Issledovaniia po psichologii vospitanii. (Investigations on the psychology of education.) Moscow: Izdatel'stvo Akademii Nauk SSSR, 1948. 431 p.—This volume is a compilation of a number of investigations in the following areas: interdependence of the sensory organs, constancy in the perception of color, size and form, interrelationship of ideational and structural components of perception, perception of time and time intervals, and consonance in the perception of unison. Several of the studies also deal with functional variability in perception. The motif common to all of the investigations is the negation of the functional nature of perception as postulated by Gestalt psychology and the assertion of a materialistic principle wherein the nature of the object is the determining reality factor in all perceptive processes.—M. G. Nemets.

(See also abstracts 3864, 4079, 4096, 4108)

VISION

3618. Arbenz, Jean. (University Eye Clinic, Basle, Switzerland.) Ueber die Wirkung einiger Pharmaka auf die Nachbilddauer. (On the effects of certain pharmacological agents on the course of after-images.) *Ophthalmologica*, 1949, 118, 321-334.—The writer examined the effects on very intensive after-images of certain miotica, mydriatica and vasodilating agents. Some effects follow from pilocarpine, being due very likely to miosis. 50 references. French and English summaries.—S. Ross.

3619. Boehm, G. Ueber das entoptische Phänomen der "blauen Bögen." (Concerning the entoptic phenomenon of "blue arcs.") *Ophthalmologica*, 1949, 118, 276-304.—The phenomenon of the "blue arcs" of the retina and the theories offered for its interpretation are discussed. 6 night-blind and 2 totally color blind individuals were examined with a specially designed apparatus. 5 of the night-blind subjects were able to perceive the blue arcs. However, these same subjects did not perceive or could hardly perceive blue arcs of the same or greater intensity, which were artificially projected. Total color-blinds can perceive the blue arcs very easily. The author holds to the probable validity of the theory of secondary retinal stimulation by action currents, and also concludes that this entoptic phenomenon can take place without the participation of functioning cones. 77 references.—S. Ross.

3620. Chapanis, A. (Johns Hopkins U., Baltimore, Md.) How we see: a summary of basic principles. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 3-60.—Review of "units and methods of measurement in visual science . . . [and] a description of certain visual processes and functions . . ." under major headings of: visual stimuli, dark adaptation and night vision, visual acuity, visibility, and an appendix on measurement and nomenclature. 103-item bibliography.—C. M. Louttit.

3621. Chapanis, A. (Johns Hopkins U., Baltimore, Md.) Vision. *Annu. Rev. Psychol.*, 1951, 2, 45-64.—Review of literature of 1945-1950 under major headings: basic visual functions, visual perception, physiological bases, applied visual research. 96-item bibliography.—C. M. Louttit.

3622. Colenbrander, M. C. The accuracy of depth-perception through movement parallax. *Ophthalmologica*, 1949, 118, 1039-1041.—Abstract and discussion.

3623. Colenbrander, M. C. Problems of the violet end of the spectrum. *Ophthalmologica*, 1950, 119, 171-174.—Abstract and discussion.

3624. Enos, Marjorie V. Anomalous correspondence. *Amer. J. Ophthal.*, 1950, 33, 1907-1914.—Methods of testing and treatment of anomalous correspondence in strabismus are reviewed from the orthoptic point of view.—D. Shaad.

3625. Fischer, F. P., Bouman, M. A., & ten Doeschate, J. Tritanopia. *Ophthalmologica*, 1949, 118, 1037-1039.—Abstract and discussion.

3626. Gordon, Rosemary A. An experiment correlating the nature of imagery with performance on a test of reversal of perspective. *Brit. J. Psychol.*, 1950, 41, 63-67.—In an experiment involving 20 persons with autonomous imagery and 22 with controlled imagery, a relationship was found between type of imagery and the degree to which the subject could voluntarily increase or reduce rate of reversal in a reversal of perspective test. ". . . the subject whose imagery is relatively controlled is capable of exerting more volition in relation to rate of reversal than lies within the ability of the autonomous imagery type."—L. E. Thune.

3627. Gurtovol, G. K. (Dept. Psychol., Inst. Philos., Moscow, USSR) *Svoistva zreniya akhromatov*. (Properties of vision in achromats.) Moscow: USSR Acad. Med. Sci., 1950. 22 p. 1 rub., 10 kop.—In achromats sound, adrenalin, and electric stimulation do not affect the sensitivity of the visual apparatus to light; in trichromats influence on sensitivity to light is demonstrable. For achromats during the action of sound at 95 decibels electric sensitivity is lowered on the average by 30% in both dark and light adaptation; for trichromats, however, electric sensitivity is raised on the average by 37% under conditions of dark adaptation and lowered by 37% under conditions of light adaptation.—I. D. London.

3628. Henkes, H. E. Retinomotor-phenomena and daily rhythm. *Ophthalmologica*, 1949, 118, 1019-1021.—Abstract and discussion.

3629. Kume, K. *Ōkisa no kōjō ni okeru Brunswik, Thouless shisū no tekiyō genkai ni tsuite*. (Limitations of the applicability of the Brunswik-Thouless index for the evaluation of size constancy.) *Jap. J. Psychol.*, 1948, 19, 76-82.—The Brunswik-Thouless index of phenomenal regression fails to provide a general scale for the evaluation of size constancy since particular values must be relative to the distance of observation. Differences in the amount of constancy tend not to become apparent with high values of the index since they lead to a broad but insensitive scale. Nevertheless, the index can be profitably used if its limitations are clearly specified.—W. F. Day.

3630. Lapina, A. A. *Sravnenie vliyaniia vitamina A i karotina na chuvstvitev'nost' k svetu tēmno-adaptirovannogo glaza*. (A comparison of the influence of vitamin A and carotene on sensitivity of the dark-adapted eye to light.) *Fiziol. Zh. SSSR*, 1949, 35, 463-466.—If influence on sensitivity of night vision is the criterion, the biological activeness of vitamin A is about 2 times higher than that of carotene.—I. D. London.

3631. Nichols, John V. V. The relationship of heterophoria to depth perception in aviation (Part III). *Amer. J. Ophthal.*, 1950, 33, 1891-1903.—Physiologic factors (binocular parallax and diplopia), psycho-physical factors (size, motion parallax, perspective), enter the aviation situation in the perception of depth. Under most conditions in aviation, monocular cues are dominant. Aside from the effect of anoxia, there is little evidence that good ocular muscle balance or stereopsis is essential to safe flying. There is apparently no correlation between ocular muscle balance and landing skills; the author suggests that in the absence of frank diplopia, no limitations should be placed on ocular muscle balance for pilot duty. 15 references.—D. Shaad.

3632. Ogle, Kenneth N. (Mayo Foundation, Rochester, Minn.) Researches in binocular vision.

Philadelphia: W. B. Saunders, 1950. x, 345 p. \$7.00.—Research on the sensorial and motor coordination of the eyes in the achievement of binocular single vision ("fusion") which in its highest development mediates stereopsis and perception of third dimensional relationships are discussed in four parts: organization and sensory cooperation of the two retinas; fusional processes in binocular single vision; the problems in binocular vision when changes are made in the relative magnifications of the images of the two eyes; the experimental and theoretical bases for aniseikonia. Theory of the correction of aniseikonia and the apparent orientation of the cross of the space eikonometer are discussed in the appendices; the book presents a complete review of aniseikonia and its significance in binocular vision; 259-item bibliography.—D. Shaad.

3633. Peckham, R. H., & Harley, R. D. Reduction in vision due to sunlight. *Amer. J. Ophthal.*, 1950, 33, 1928-1930.—Abstract.

3634. Pickford, R. W. (Glasgow U., Scotland.) An item-analysis of the Ishihara test. *Brit. J. Psychol.*, 1950, 41, 52-62.—A comparison on the 25-plate version of the Ishihara test with tests based on the Rayleigh Equation made possible an assessment of the reliability of the individual plates, and of the major groups of plates, in distinguishing normals, minor defectives, and major defectives. "No plates . . . were better than others for distinguishing any particular type of defect . . . except that a proportion of darkened red subjects can be identified." A shortened form of the test consisting of Plates 10, 11, 14, 15, 18, and 23 (plus Plate 1 as a 'joker') was found to be more reliable than the 25-plate version.—L. E. Thune.

3635. ten Doesschate, J. Extra-foveal threshold value for light-perception and the distribution of rods over the retina. *Ophthalmologica*, 1950, 119, 164-165.—Abstract and discussion.

3636. Winkelman, J. E. Relative localization in abnormal retinal correspondence. *Ophthalmologica*, 119, 166-171.—Abstract and discussion.

(See also abstracts 3589, 3608, 4012, 4066, 4081)

AUDITION

3637. Fernandez, C., Gernandt, B. E., Davis, H., & McAuliffe, D. R. (Central Inst. for Deaf, St. Louis, Mo.) Electrical injury of the cochlea of the guinea pig. *Proc. Soc. exp. Biol., N. Y.*, 1950, 75, 452-455.—The injurious effects produced by electro-coagulation and electrolysis in the polarization of the cochlea are twofold. Histologic study shows (1) a necrosis consequent to heat adjacent to the area of electrode placement and (2) the formation of bubbles. Other results pertinent to the experiment are to be reported elsewhere, especially those dealing with the effect of polarization upon the microphonic and action potentials.—L. A. Pennington.

3638. Fletcher, Harvey. A method of calculating hearing loss for speech from an audiogram. *Acta oto-laryng.*, Stockh., 1950, Suppl. 90, 26-37.—

Formula is given by which hearing loss for speech may be calculated from an audiogram. On three independent sets of observations, calculated hearing losses based on formula agree very well. Calculations agree better than familiar rule of averaging hearing loss for 500, 1000 and 2000 cps. A simplified, almost as reliable rule, is to examine the hearing losses for 500, 1000 and 2000 cps., and to average the two smallest losses.—I. J. Hirsh.

3639. Kahana, Lawrence; Rosenblith, Walter A., & Galambos, Robert. (Harvard U., Cambridge, Mass.) Effect of temperature change on round-window response in the hamster. *Amer. J. Physiol.*, 1950, 163, 213-223.—"The round-window response of the hamster cochlea to acoustic clicks is described. The microphonic and neural components identified. . . . When the body temperature of the [anaesthetized] hamster is varied between 18°C and 39°C systematic [reversible] changes in the electrical response . . . are observed. The amplitude of both microphonic and neural components is decreased by temperatures below 30°C. The neural component declines more rapidly [and increases in latency and duration]. The latency of the . . . microphonic component remains constant . . . over the [temperature] range investigated."—R. B. Bromiley.

3640. Kinsler, Lawrence E. (U. S. Naval Post-grad. Sch., Annapolis, Md.), & Frey, Austin R. *Fundamentals of acoustics*. New York: Wiley, 1950. vii, 516 p. \$6.00.—Authors recommend this textbook for use in a basic course in acoustics that presupposes some mechanics, electricity and calculus. In addition to 15 other chapters on traditional acoustic subjects, there is a chapter on "psycho-acoustics" of special interest to psychologists. Chapter sketches anatomy of ear followed by data on auditory thresholds, equal loudness contours, and masking. There are also elementary discussions of pitch, timbre, beats, combination tones and binaural localization. Nine work problems for chapter.—I. J. Hirsh.

3641. Kosteljik, P. J. *Theories of hearing*. Leiden, Netherlands: Universitaire pers Leiden, 1950. x, 180 p.—Introductory chapters survey present knowledge of the anatomy and physiology of the ear. History of theories of hearing up to middle of nineteenth century is followed by detailed consideration of two kinds of modern auditory theory: one concerned with the transmission of sound to the end organ, and the other with frequency analysis. Frequency analysis is treated first by mathematics and resonance phenomena and second by more recent hydrodynamic theories. A further chapter considers the biophysics of sound conduction in the ear. References to an extensive bibliography are made throughout the text, bringing a mass of experimental data to bear upon most of the important theoretical issues that have been raised concerning sound conduction and frequency analysis in the auditory system.—I. J. Hirsh.

3642. Meyer, Max F. *How we hear; how tones make music.* Boston, Mass.: C. T. Branford, 1950. 117 p. \$2.50.—This book is divided into two parts: first, a simplified form of the author's theory of the role and working of the cochlea in hearing and second, some theoretical considerations of certain aspects of music. "I have here summarized my work of fifty years in acoustics and music, scattered over thirty articles in scientific magazines in both German and English, taking into account recent discoveries." "The book is addressed to acousticians, otologists, theorizing musicians, teachers of speech correction, teachers of the deaf, and laymen interested in general science."—*J. J. Hirsh.*

3643. Munson, W. A., & Gardner, Mark B. (*Bell Telephone Laboratories, Inc., Murray Hill, N. J.*) *Loudness patterns—a new approach.* *J. acoust. Soc. Amer.*, 1950, 22, 177-190.—In the present tests, the probe tone was presented after the primary tone was turned off. The resulting residual masking patterns differ in a number of important respects from patterns based on the simultaneous masking procedure. The amount of residual masking produced by a primary tone of given frequency depends upon its level, upon the frequency at which the masking effect is determined, and somewhat upon the duration of the primary tone.—*W. A. Rosenblith.*

3644. Munson, W. A., & Wiener, Francis M. (*Bell Telephone Laboratories, Murray Hill, N. J.*) *Sound measurements for psychophysical tests.* *J. acoust. Soc. Amer.*, 1950, 22, 382-386.—Since psychophysical measurements in audition show usually greater variability than measurements in physical acoustics the impression prevails that the variance of psychoacoustic data is largely due to the inability of observers to give consistent responses. The reported threshold measurements (both earphone and free field) were carried out with automatic equipment using the "ABX" signal sequence (50 items) and accompanied by search tube measurements of the sound in the ear canal of the observers. Data for two observers yield a variance of the threshold determinations from the mean for pure tones of about 1.5 (db)². Careful control of stimulus conditions results thus in an appreciable reduction of the normally reported variability. The small residual variance is believed to be primarily a measure of the variability of the observers' sensory system.—*W. A. Rosenblith.*

3645. Peterson, L. C., & Bogert, B. P. (*Bell Telephone Laboratories, Murray Hill, N. J.*) *A dynamical theory of the cochlea.* *J. acoust. Soc. Amer.*, 1950, 22, 369-381.—A hydrodynamical theory is given for a cochlear model. The equations of motion and of continuity are written for the non-dissipative case and numerical solutions are derived on the basis of v. Békésy's data for the dynamical constants. Calculated values for the loci of maximum deflection of the membrane and for the propagation velocities along the membrane are in broad agreement with v. Békésy's experimental

findings. Appendices deal with the effects of viscosity and general circuit analysis of the cochlea.—*W. A. Rosenblith.*

3646. Schubert, Earl D. (*U. Michigan, Ann Arbor.*) *The effect of a thermal masking noise on the pitch of a pure tone.* *J. acoust. Soc. Amer.*, 1950, 22, 497-499.—The pitch of a pure tone (500, 1200, 2000 and 3000 cps) is raised by the simultaneous delivery of a masking noise to the same ear. This raise in pitch increases with frequency and is more marked at low intensity levels; however the phenomenon ceases apparently to be present if the pure tone is 20 db or more above its masked threshold. Control measurements suggest that the effect is neither attributable to diplacusis binauralis nor to the difference in intensity between the masked and unmasked tone which had been matched in loudness.—*W. A. Rosenblith.*

3647. Webster, J. C., Himes, Harold W., & Lichtenstein, Malcolm. (*U. S. Navy Electronics Laboratory, San Diego, Calif.*) *San Diego County Fair hearing survey.* *J. acoust. Soc. Amer.*, 1950, 22, 473-483.—A phonographically recorded pure tone test was administered to about 3600 visitors at the fair. Absolute thresholds were determined at 5 frequencies (440, 880, 1760, 3520, and 7040 cps) and masked thresholds at 2 frequencies (880 and 3520 cps). The data were analyzed according to the age and sex of the listeners; also according to the listener's statements as to whether or not they had difficulty in hearing, they had had musical training, and had "worked or lived where there was extreme noise."—*W. A. Rosenblith.*

3648. Wever, Ernest Glen. (*Princeton U., N. J.*) *Hearing.* *Annu. Rev. Psychol.*, 1951, 2, 65-78.—Literature of 1949-1950 reviewed under major headings; ear anatomy, middle ear mechanics, cochlear potentials, audiometry, loudness and masking, binaural phenomena, auditory disorders, auditory theory. 94-item bibliography.—*C. M. Louttit.*

3649. Wever, Ernest Glen, & Lawrence, Merle. (*Princeton U., N. J.*) *The acoustic pathways to the cochlea.* *J. acoust. Soc. Amer.*, 1950, 22, 460-467.—Sound reaches the cochlea either via the ossicular chain-oval window pathway or via the round window. When sound is delivered to the inner ear via both pathways simultaneously the recorded cochlear potentials represent the vector sum of the potentials generated in response to each stimulus separately. Each type of stimulation excites the same sensory cells. Over a major part of the frequency range a minimum response is elicited when the tones at both windows are in phase. Departures from this phase relation which are most prominent at frequencies above 4000 cps are explained in terms of reactance differences between the two windows. The bearing of these findings upon certain forms of conductive deafness and the fenestration operation is discussed.—*W. A. Rosenblith.*

(See also abstracts 3609, 4009)

RESPONSE PROCESSES

3650. Brožek, Josef, & Mickelsen, Olaf. (*U. Minnesota, Minneapolis.*) Diet. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 311-327.—Problems of nutritional research are briefly reviewed with a special emphasis on needs of man and with considerable detailed emphasis on the nutritional requirements of submarine personnel. 67-item bibliography.—C. M. Louitt.

3651. Butler, C. G. *The honeybee, an introduction to her sense-physiology and behaviour*. London and New York: Oxford University Press, 1949. vi, 139 p. \$2.50.—A survey of sense-physiology and behavior of bees under the following topics: social life and the division of labor; senses (including color vision, perception of form, hearing, time, smell, and taste); collection and utilization of propolis, water, pollen, and nectar; behavior in the field. Chapter references.—A. J. Sprow.

3652. Comfort, Alex. (*London Hosp. Med. Coll., London, Eng.*) *Sexual behavior in society*. New York: Viking Press, 1950. 157 p. \$2.75.—This physician-novelist believes in "full public discussion and information" in the field of sexual behavior but thinks it "also true that the task of deflating the emotional currency of sex is equally important." Having stated this thesis, he defends it in 6 chapters entitled: (1) The scope and purposes of sexual sociology, (2) The biological background, (3) The social background and its problems, (4) Monogamy and the pattern of sexual conduct, (5) Law and the pattern of sexuality, and (6) Remedies and methods. 73-item bibliography.—C. R. Adams.

3653. der Beeck, Manfred. *Psychische und charakterliche Veränderungen bei Hungerzuständen*. (Psychological and characterological changes during semi-starvation.) *Hippocrates, Stuttgart*, 1949, 20, 44-47.—Based on observations made in prison camps. Food deprivation results in a variety of alterations in the individual's feeling of well being and behavior. During the first weeks, the lowered food intake in the camps stimulated hunting for jobs with "official" status, etc. In succeeding months the men exhibited increasing ego-centricity, narrowing of intellectual interest, irritability, paranoid reactions related to the apportioning of food, moral deterioration with the loss of all scruples and lowering to the animal level. The terminal stadium was characterized by decreased awareness, ending in stupor and death. Even moderate food deficit, if chronic, results in psychological alterations.—J. Brožek.

3654. Frisch, Karl von. (*U. Munich, Germany.*) *Bees: their vision, chemical senses, and language*. Ithaca, N. Y.: Cornell University Press, 1950. xiii, 119 p. \$3.00.—In these 3 lectures von Frisch summarizes for lay audiences his experiments on bee behavior. Bees are found to respond to yellow, blue-green, blue, and ultraviolet wave lengths. Four taste stimuli are responded to as in man, and smell sense shows a similarity also; in bees touch and smell

are closely associated. In the final lecture and an appendix experiments are described which demonstrate that in their dances bees do communicate both distance and direction location of food. 6-page bibliography.—C. M. Louitt.

3655. Furtado Portugal, José Laurencio. *Estudo comparativo de provas coletivas de motricidade (tapping, tracing e labirinto) executadas com e sem movimento dos dedos. Exame de validade das duas técnicas*. (A comparative study of group tests of motricity (tapping, tracing, and labyrinth) executed with and without movement of fingers. Examination of the validity of the two methods.) *Arch. bras. Psicotécnica*, 1950, 2(2), 7-27.—From a comparative study of performances on group tests of motricity (tapping, tracing, and labyrinth) with and without movements of the fingers the following conclusions are drawn: (1) The tracings obtained with pencil do not appear to be influenced by the previous handwriting skill of the subjects; (2) the correlations between criteria of the tests and those of the teachers with respect to manual skill are insignificant; (3) there is a learning process involved in both methods, i.e., with or without finger movements; (4) it is not possible to say which method is superior. English summary.—F. C. Sumner.

3656. Gregg, Lee W., & Brogden, W. J. (*U. Wisconsin, Madison.*) The relation between duration and reaction time difference to fixed duration and response terminated stimuli. *J. comp. physiol. Psychol.*, 1950, 43, 329-337.—"The present experiment was designed to determine the relationship between the magnitude of the difference in reaction time between that to fixed duration and response terminated stimulus conditions as the fixed duration stimulus was varied. . . . The magnitude of the differences was found to increase in favor of the response terminated stimulus condition as the duration of the fixed-duration stimulus increased." "The possibility is discussed that response termination of the reaction stimulus is not a significant factor in reaction time per se, and that it reflects only part of a general relation of increase in reaction time as the duration of the auditory reaction stimulus increases."—L. I. O'Kelly.

3657. Gregg, Lee W., & Brogden, W. J. (*U. Wisconsin, Madison.*) The relation between reaction time and the duration of the auditory stimulus. *J. comp. physiol. Psychol.*, 1950, 43, 389-395.—Results are reported of reaction time to auditory stimuli of fixed durations varying from 100 to 2400 ms. Comparison with response terminated reaction times showed no significant differences between the slopes of the best fitting straight lines for the two sets of data. "This evidence indicates that reaction time to the auditory stimulus as a function of stimulus duration is the primary relation and that this relation is merely reflected by the relation of duration to the differences in reaction time made to fixed duration and response terminated stimuli."—L. I. O'Kelly.

3658. Hedlund, James L., & Lewis, Don. Further attempts to demonstrate interference in the

performance of rotary pursuit tasks. Port Washington, L. I., N. Y.: U. S. Navy Special Devices Center, 1950. 11 p. (Tech. Rep. SDC 938-1-3.)—To verify previous findings, experiments were conducted with new rotary pursuit devices, namely a double-disk apparatus with auxiliary wobble-stick, and an epicycle pursuit rotor. No negative transfer resulted, thus confirming "the apparent absence of interference" and "the presence of positive transfer in pursuit activity." The Wylie hypothesis is restated in an effort to explain the phenomena described.—R. Tyson.

3659. Hunt, J. McV. (*Inst. of Welfare Research, New York*), & Schlosberg, H. Behavior of rats in continuous conflict. *J. comp. physiol. Psychol.*, 1950, 43, 351-357.—Observation of the cage activity of six rats subjected to conflict induced by an electrified water bottle in their cages revealed an increase in the amount of activity during the normally quiet daytime period but no overall increase. A variety of maladaptive behavior occurred, such as biting and pulling at an electrically inactive bottle and "tantrums" behavior.—L. I. O'Kelly.

3660. Key, K. H. L. (*Commonwealth Scientific & Industrial Research Organization, Canberra, Australia*) A critique on the phase theory of locusts. *Quart. Rev. Biol.*, 1950, 25, 363-407.—The theory proposed in 1921 by Uvarov maintains that the periodicity of locust invasions is the result of the "transformation of the swarming locust into a solitary, harmless grasshopper" and that the 3 "supposed species" of locusts studied represent phases (swarming, intermediate, solitary) in the insect's life cycle. The author reviews the history and the evidence, concluding that Uvarov's phase theory is ambiguously stated and as such is scarcely related to the outbreak of "locust epidemics." These can best be understood as due to increases in population, to "behavioral stimulation," and to the ecology of the area where the outbreak occurs. It is these factors . . . "rather than phase transformations" . . . that produce the swarms. 98 references.—L. A. Pennington.

3661. Marx, Melvin H. (*U. Missouri, Columbia*) Note on depression of spontaneous running activity by the appetite depressant gossypol in rats. *J. comp. physiol. Psychol.*, 1950, 43, 396-397.—The activity wheel behavior of 12 adult female rats was observed before and following administration of daily doses of 100 mg./kg. purified gossypol. This substance depresses appetite by delaying passage of food from stomach to small intestine. Results indicate an almost complete loss of activity in the gossypol group. Death of two animals suggests caution in use of the substance as a means of controlling obesity.—L. I. O'Kelly.

3662. Miassoedova, N. A. Reaktsiya s priamol kishki na deiatel'nost' pockeh. (Reflex action from the rectum on kidney activity.) *Fisiol. Zh. SSSR*, 1949, 35, 316-329.—The kidneys respond to strong stimulation of the rectal interoceptive apparatus with a micturitional diminution proceeding almost

to anuria in the case of electric stimulation of the ampulla.—I. D. London.

(See also abstracts 3524, 3685, 4062, 4089)

COMPLEX PROCESSES AND ORGANIZATIONS

3663. Arkhangel'ski, S. N. Psichologicheskij analiz protsessov planirovaniia deiatel'nosti rabochim-stakhanovtsem. (The psychological analysis of the process of planning of activity by Stakhanovites.) *Izv. Akad. pedag. Nauk RSFSR*, 1950, No. 25, 217-236.—The work activity of Stakhanovite cutters is analyzed in order to illuminate the psychological process of planning.—I. D. London.

3664. Geiger, Theodor. (*U. Aarhus, Denmark*) An historical study of the origins and structure of the Danish intelligentsia. *Brit. J. Sociol.*, 1950, 1, 209-220.—This is an examination of the thesis that social status of the family is as important a determinant of "cultural achievement" as native ability. A group of men considered to be contributors to the culture of Denmark in a broad sense over a period of 400 years are the subjects of the study. Final conclusions are that the intelligentsia, especially those in the language, art, and music areas, are recruited more numerously from the professional classes. However, though in smaller proportions, the middle class made a notable contribution to the more practical sciences and the well-to-do to business, while the few members of the lower class who broke into the intelligentsia usually achieved enduring fame.—L. A. Noble.

3665. Haggard, Ernest A. (*U. Chicago, Ill.*) Psychological causes and results of stress. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 441-461.—The problems of emotional stress as distinct from physiological (see 25: 3569) are reviewed. Certain conditions in submarine service and in the personality of individuals have a causative significance, while on the other hand emotional stress arising from physiological conditions results in problems of behavior. 100-item bibliography.—C. M. Louitt.

3666. Kornilov, K. N. Vospitanie voli i kharaktera. (Education of the will and character.) Moscow: Trudrezervizdat, 1950. 36 p. 65 kop.—An elementary didactic account of the nature of will and character and their educability through training within the framework of Soviet conditions and *Weltanschauung*.—I. D. London.

3667. MacCurdy, J. T. Psychopathology and social psychology. Part III. Hierarchies of interests. *Brit. J. Psychol.*, 1950, 41, 1-13.—A person's scale of values can be thought of as the values which that person places on interests which are widely distributed. Accurate assessment of this scale is rendered difficult because (1) most psychological data are not readily reduced to numerical terms, and (2) the pattern of values is likely to be unstable. Five criteria for the construction of interest-value scales expressed in qualitative terms

are proposed. These comprise degree of compulsiveness, intensity of emotional reaction, response to conflicts of reality, effect on moral judgment, and level of psychic "reality."—L. E. Thune.

3668. Marion, Frederick. *In my mind's eye*. New York: Dutton, 1950. 315 p. \$3.75.—This is an autobiographical account of a professional "psychic" whose career has been made on the stage and lecture platform. The book is presented as a true account and the author's claims to exceptional gifts are represented as genuine throughout. The chapters are arranged by topics for dramatic effect rather than in chronological order, and the experiences that are related have their setting in most of the countries of Europe and they cover virtually the entire half-century. The author offers many suggestions regarding the nature of his paranormal abilities and the conditions affecting their use.—J. G. Pratt.

3669. Tischner, Rudolf. *Ergebnisse okkultter Forschung; eine Einführung in die Parapsychologie*. (Results of occult research; an introduction to parapsychology.) Stuttgart: Deutsche Verlags-Anstalt, 1950. 212 p.—An introductory chapter on the terminology and history of parapsychology prefaces a complete systematic revision of the author's 1921 "Introduction to Occultism and Spiritism," which now incorporates the essential advances made during the past 3 decades in the investigation of parapsychological phenomena. A chapter is devoted to each of the following subjects: the subconscious, extrasensory perception, parapsychological phenomena, telekinesis and teleplasty, etc.—F. C. Sumner.

3670. Tyler, Leona E. (U. Oregon, Eugene.) *Individual differences*. *Annu. Rev. Psychol.*, 1950, 2, 95-112.—Study of differences between individuals (or groups) depends on methods of measuring characteristics. This review of literature between June 1949 and May 1950 includes selected publications on new tests and techniques, classifications of existing techniques, mental organization theories, group differences, and factors related to individual differences. 91-item bibliography.—C. M. Louitt.

(See also abstracts 3789, 4066, 4070)

LEARNING & MEMORY

3671. Alekseeva, T. T. *Reaktsii zhivotnogo na izmenenii uslovii v postanovke opyta s aktivnym vyborem*. (Animal reactions to changes of conditions in experimental set ups involving active choice.) In *Anokhin, P. K., Problemy vysshel nervnoi deiatel'nosti*, (see 25: 3586), 332-339.—All conditioned reactions consist of many components: secretory, motor, vascular, etc. and cannot be understood in terms of the latter's simple addition. The classical method of conditioning, employed by Pavlov, results in conditioning where the nonsecretory aspects of the response are minimal. The experimental situation determines the complex of components, and every change of situation results in some shift within the

complex. Experiments show that the secretory component of a conditioned reaction is more resistant to change than the motor component which is very labile and more closely tied in to changes of experimental situation.—I. D. London.

3672. Alekseeva, T. T. *Sluchal stolikogo izmenenii kharaktera uslovnoi dvigatel'noi reaktsii sobaki v usloviakh aktivno-dvigatel'nogo vybora*. (A case of stable change of character of conditioned motor reaction in a dog under conditions of active-motor choice.) In *Anokhin, P. K., Problemy vysshel nervnoi deiatel'nosti*, (see 25: 3586), 417-427.—The activity of the dog under the conditions of these experiments, which employ the "secretory-motor method," arise out of two dominant complexes, associated with specific conditioned stimuli (light and sound). The stable demarcation obtaining between the two systems of conditioned stimuli, associated with right and left sides, allows one to look on the well-developed reaction to given conditioned stimuli as constituting a finely delimited functional system which may be regarded as an elementary unit in the formation of adaptive acts in the animal.—I. D. London.

3673. Alekseeva, T. T. *Sravnitel'nai kharakteristika differentsirovannykh reaktsii s bezuslovnym podkrepleniem i bez nego*. (Comparative character of differentiated reactions with unconditioned reinforcement and without it.) In *Anokhin, P. K., Problemy vysshel nervnoi deiatel'nosti*, (see 25: 3586), 396-416.—The application of the most varied methods (such as delay, experimental interruption, application of caffeine) for testing the stability of differentiated reactions of one or another type show that, depending on the experimental conditions, it is possible to distinguish in the intricate complex of the conditioned secretory-motor reaction either the motor or secretory component of the reaction. The experimental method employed is that of "active choice."—I. D. London.

3674. Anokhin, P. K., & Artem'ev, E. I. *Fiziologicheskaya arkhitektura uslovnoi dvigatel'noi reaktsii pri aktivnom vybore storon*. (Physiological architecture of the conditioned motor reaction under active choice of sides.) In *Anokhin, P. K., Problemy vysshel nervnoi deiatel'nosti*, (see 25: 3586), 319-331.—Data are adduced to show that during the course of isolated action of a long applied conditioned stimulus, associated with motor reaction, there takes place a shift in localization of the leading complexes of excitation. In the first second the conditioned process mobilizes the motor apparatus of activity with very little participation of the cerebral cortex. Each delay in reinforcement with the unconditioned stimulus facilitates the arisal of complexes of excitation primarily cortical. The breaking up of an automatized conditioned motor reflex proceeds in reverse order: in the beginning the second phase of the conditioned reaction with primarily cortical components is altered and only with great difficulty does alteration of the motor reaction of the first second occur.—I. D. London.

3675. Baker, Robert A. (U. Kentucky, Lexington.) Establishment of a nonpositional drive discrimination. *J. comp. physiol. Psychol.*, 1950, 43, 409-415.—"The purpose of this experiment was to attempt to establish a non-positional discrimination based upon differential motivational conditions." Results showed that rats can learn to discriminate among drives when place of response varies from trial to trial. Since in early stages of training the discrimination is not apparent, motivational factors alone do not account for the behavior. "Thus it would appear that some intervening variable such as set, existing between the internal drive states and the external cues, must be postulated. . . ."—L. I. O'Kelly.

3676. Berlyne, D. E. (U. St. Andrews, Scotland.) Novelty and curiosity as determinants of exploratory behavior. *Brit. J. Psychol.*, 1950, 41, 68-80.—An analysis of curiosity and exploratory behavior led to the formulation of a theory to deal with exploratory behavior in response to novelty. It consists of two postulates: Postulate I. When a novel stimulus affects an organism's receptors, there will occur a drive-stimulus-producing response which we shall call "curiosity." Postulate II. As a curiosity-arousing stimulus continues to affect an organism's receptors, curiosity will diminish. Three corollaries are derived from these postulates in conjunction with Hull's theory. An experiment with rats which lead to confirmation of 4 predictions from this system is reported. 25 references.—L. E. Thune.

3677. Buxton, Claude E. (Yale U., New Haven, Conn.) Learning. *Annu. Rev. Psychol.*, 1951, 2, 23-44.—The literature of 1949-1950 is reviewed under the major headings; theoretical viewpoints, types of learning, latent learning, place vs. response, reinforcement, set and perception, generalization, verbal, and motor learning. 90-item bibliography.—C. M. Louttit.

3678. Cooper, Joseph B. (San Jose State Coll., Calif.) Learning and social behavior: a point of view. *J. soc. Psychol.*, 1950, 32, 31-43.—The view is presented that "learning be thought of as an abstraction which amounts operationally to a facility by which animal organisms modify explicit and, on high levels of development, implicit patterns of response in terms of past experiences. This facility permits varying degrees of differentiation of the attractive and repellent regions within the life space of the individual. Learning should not be thought of as a defined and self-contained process. It represents only one abstracted aspect of 'adjusted' behavior. That which is learned by an individual may or may not be of actual long range homeostatic values to the individual."—J. C. Franklin.

3679. Jaynes, Julian. (Yale U., New Haven, Conn.) Learning a second response to a cue as a function of the magnitude of the first. *J. comp. physiol. Psychol.*, 1950, 43, 398-408.—Rats were trained to lift up cards, the three groups being required to lift to different heights. They were then trained to a similar discrimination with a reversal of

the cues. In another experiment, following similar original learning animals were required to learn a successive T-maze discrimination. In both experiments the animals whose original learning involved the greatest magnitude of response learned the second task the more rapidly.—L. I. O'Kelly.

3680. Kas'ianov, V. M. *Fiziologicheskoe znachenie limbicheskoi oblasti mozga sobaki*. (The physiological significance of the limbic area of the brain in the dog.) In Anokhin, P. K., *Problemy vysshel nervnoi deiatel'nosti*, (see 25: 3586), 223-271.—With extirpation of the rear limbic area of the right hemisphere conditioned and unconditioned salivary secretion in dogs continues for close to 2 months to occur with periodic lapses of one kind or another. Afterwards, the latter disappear, due evidently to compensatory developments.—I. D. London.

3681. Kas'ianov, V. M. *Znachenie prostranstvennoi orientatsii uslovnogo razdrazhitelia dlia aktivnogo vybora storon*. (The significance of spatial orientation of the conditioned stimulus for active choice of sides.) In Anokhin, P. K., *Problemy vysshel nervnoi deiatel'nosti*, (see 25: 3586), 387-395.—Spatial change of one of the conditioned stimuli, employed by the "method of active choice," is accompanied by changes in the cortical excitatory processes, causing the substitution of one systemic process by another. Despite the fact that only one stimulus (bell) was spatially displaced from time to time, disturbance of behavior in the experimental dog used, spread to the undisplaced stimulus (tone) in the form of incorrect conditioned motor reactions or in the form sometimes of absence of motor reactions to it.—I. D. London.

3682. Laptev, I. I. *Obrazovanie uslovnogo refleksa s reflektivnoi oblasti, poluchivshei geterogeniymu innervatsiyu (bluzhdaiushchego nerva s tsiliarnymi)*. (The formation of conditioned reflexes with a field of reception, which has gotten heterogeneous innervation (vagus nerve along with the ciliary nerves).) In Anokhin, P. K., *Problemy vysshel nervnoi deiatel'nosti*, (see 25: 3586), 272-280.—As a result of an operation on a dog, the central end of the vagus nerve was made to join with the peripheral end of the visual nerve associated with the eyeball. It was found that it was possible to develop corresponding conditioned reflexes on utilization of the resulting "vagalized" peripheral zone for the reinforcement of conditioned signals. The formation of emetic conditioned reflexes, on utilizing the "vagalized" zone, proceeds slowly and with great difficulty. Such reflexes are distinguished by their extreme lability and instability. The formation of other elements of vagal conditioned reactions, such as sneezing and change of breathing, proceeds more rapidly and is more stable.—I. D. London.

3683. Laptev, I. I. *Obstanovka kak kompleksnyi uslovnii razdrazhitel'*. (The situation as a complex conditioned stimulus.) In Anokhin, P. K., *Problemy vysshel nervnoi deiatel'nosti*, (see 25: 3586), 461-475.—For the same conditioned stimulus (bell), applied

in the morning as a signal for feeding and in the evening as a signal for a defensive reaction, it is possible to develop corresponding reflexes. Experimental data confirm the conception of the "functional system as a unit of integrated activity of the organism." According to this conception, then, "the functional system, operative at a given moment, mobilizes all the apparatus providing for the maximal adaptability of the animal and excludes all other functional systems, not adequate to the given situation."—I. D. London.

3684. Laptev, I. I. Opyt izuchenia uslovno-reflektornoi deiatel'nosti sobaki metodom elektro-encefalografii. (An experiment on the conditioned-reflex activity of a dog by the method of electro-encephalography.) In *Anokhin, P. K., Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 147-162.—Changes in cortical electrical waves in response to conditioned stimuli (intermittent light, contact) do not differ in form from changes, caused by indifferent stimuli. Suppression of α -rhythm is observed, accompanied by increase of high-frequency oscillations. The action of an indifferent stimulus (light) on α -rhythm is not the same for the visual and sensorimotor areas. Changes in α -waves in response to conditioned stimuli (light, contact) exhibit a reciprocal relation as regards the visual and motor areas. Extended action of intermittent light as conditioned stimulus brings about relative adaptation in cortical electrical activity.—I. D. London.

3685. Laptev, I. I. O sostave dvigatel'nol reaktsii sobaki pri uslovnom i bezuslovnom oboronitel'nom refleksse. (On the composition of the motor reaction of a dog in conditioned and unconditioned reflexes.) In *Anokhin, P. K., Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 208-214.—At the start of the process of developing conditioned electrodermal reflexes in dogs, a conditioned reaction of a general motor type is formed with subsequent comparative narrowing of local movements in the reinforced leg. At any period in the development of the conditioned defensive reflex, there is observed in most dogs, during the time of action of the unconditioned and conditioned defensive reflexes, local reactions not only of the reinforced limb, but in some measure also of the other limbs. The conclusion is drawn that the physiological mechanism of transfer from general to local motor reaction involves spread of negative induction, proceeding from a local dominant point of the sensorimotor zone of the cortex, onto the remaining components of the effector portion of the conditioned reflex.—I. D. London.

3686. Laptev, I. I. Sekretorno-dvigatel'nyi metod izuchenia uslovnykh refleksov pri chetyrehkstornem aktivnom vbyore. (The secretory-motor method of study of conditioned reflexes with four-sided active choice.) In *Anokhin, P. K., Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 451-460.—Given four possibilities, choice of sides of reinforcement, accompanying appropriate conditioned signals, was acquired by a 5 months old dog under

the following conditions: (1) a strictly stereotyped order in sequence of conditioned signals, (2) division of "all tasks, composed of four elements, into 2 equivalent complexes, with development of the secretory-motor reaction at the beginning to the first complex and with subsequent union of the second," and (3) non-reinforcement of erroneous conditioned reactions.—I. D. London.

3687. Laptev, I. I. Uslovnye oboronitel'nye refleksy perednei konechnosti pri perekrestnykh anastomozakh nervnykh stvolov na zadnikh konechnostyakh. (Conditioned defensive reflexes of the fore limb in crossed anastomosis of the nerve stems in the rear limbs.) In *Anokhin, P. K., Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 215-222.—Under conditions of crossed anastomosis of the motor nerves of the rear limbs, the conditioned reaction of the non-operated fore limb of dogs develops easily and quickly. The conditioned reaction is a "copy" of the unconditioned reaction only in so far as the unconditioned reaction leads to satisfaction of definite states such as diminution of hunger, elimination of pain, etc. Otherwise, "the conditioned reaction appears in other forms, preserving, however, all basic content and direction."—I. D. London.

3688. Laptev, I. I. Vyrabotka dvigatel'nogo stereotipa u shchenkov. (The development of a motor stereotype in puppies.) In *Anokhin, P. K., Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 540-558.—In this study the "general motor method" was employed on dogs about 3-4 months of age. In puppies the excitatory processes are sharply expressed, while the "function of inhibition remains relatively underdeveloped." Because of this, puppies show greater nervous susceptibility to different stimuli. The final formation of conditioned reflexes is in puppies a long drawn out process. However, "conditioned reactions, already formed, tend quickly toward automatization."—I. D. London.

3689. Laptev, I. I. Vyrabotka novykh uslovnykh sviaszel na fone razrusheniia starykh navykov. (The production of new conditioned connections against a background of destruction of old habits.) In *Anokhin, P. K., Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 360-370.—The shift of an experimental animal from training under the classical method of conditioned reflexes to training under the "secretory-motor method" with maintenance of the former stimuli and character of reinforcement reveals several regularities of higher nervous activity which do not appear if only the secretory index is employed. With extended application of constant and unchanging conditioned stimuli there develop in the higher divisions of the central nervous system conditioned functional systems—"patterns of reactions." As a result, the animal acquires the ability to utilize these patterns automatically as elementary functional units.—I. D. London.

3690. Lichtenstein, P. E. (Denison U., Granville, O.) Studies of anxiety: II. The effects of lobotomy

on a feeding inhibition in dogs. *J. comp. physiol. Psychol.*, 1950, 43, 419-427.—After establishing stable feeding inhibition by application of electrical shock during feeding, bilateral frontal lobotomies were performed. Animals so treated showed partial or complete loss of feeding inhibition and related anxiety symptoms. Dogs lobotomized before the establishment of feeding inhibition acquire the inhibition as readily as normal animals. Relearning of inhibition removed by lobotomy requires about the same number of trials as original learning.—L. I. O'Kelly.

3691. Maier, Norman R. F., & Longhurst, Joan U. (U. Michigan, Ann Arbor.) The effect of lactose-free diet on problem solving behavior in rats. *J. comp. physiol. Psychol.*, 1950, 43, 375-388.—Rats of two different strains were raised on lactose-free or 10% lactose diet and were tested on the Maier 3-table reasoning problem. Animals maintained on standard colony diet were also used. The results indicate "females of both strains reared on the lactose diet were significantly superior in reasoning performance to the comparable females reared on the basal diet." Only one strain of males reared on lactose diet showed significant superiority. Both males and females reared on colony diet were superior to those reared by lactose-free diet.—L. I. O'Kelly.

3692. Marx, Melvin H., & Ederstrom, H. E. (U. Missouri, Columbia.) The effect of repeated phenobarbital administration on learning. *J. comp. physiol. Psychol.*, 1950, 43, 428-435.—"Thirty-three matched pairs of weanling albino rats were divided into experimental and control groups and given daily intraperitoneal injections of 40 mg/kg body weight of pentobarbital sodium or saline solution, for a period of four weeks. After a four day rest interval all animals were given 12 days of training on a 14 unit modified Stone multiple-T water maze, to a total of 60 trials, and 12 days of training on a simple brightness discrimination test, also using escape-from-water motivation, to a total of 120 trials. The results clearly indicated statistically significant inferiority, as measured by trials and errors, in both types of learning situations for the female rats. No significant differences were found for the males."—L. I. O'Kelly.

3693. Meier, Gilbert W., & Bunch, Marion E. (Washington U., St. Louis, Mo.) The effects of natal anoxia upon learning and memory at maturity. *J. comp. physiol. Psychol.*, 1950, 43, 436-441.—When white rats exposed to low O₂ tension for 30 minutes within 3 hours after birth and then tested between 75 and 100 days of age on a single unit T water maze for initial learning, immediate reversal of the position habit, reversal after 2 or 14 days and relearning of the original habit after 2 or 14 days, no statistically significant differences were found in original learning or relearning for either time interval. Anoxic animals were inferior to controls (5% level) in immediate and 2-day reversal, but better (1% level) after a 14 day interval.—L. I. O'Kelly.

3694. Nemtsova, O. L. O sposobnosti kory bol'shikh polusharil k reseptsiyai v moment delstviya bezuslovnogo razdrazhiteliya. (On the ability of the cerebral cortex for reception at the time of action of the unconditioned stimulus.) In *Anokhin, P. K., Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 186-195.—From experiments, in which the unconditioned stimulus preceded the conditioned stimulus, Pavlov assumed that at the time of action of the unconditioned stimulus the cortical cells, responsive to the conditioned stimulus, are in an inhibitory state because of negative induction from the alimentary center. Experiments show that one must take exception to this view.—I. D. London.

3695. Nemtsova, O. L. Summatsiya uslovnykh razdrazhiteliy v obstanovke aktivnogo vybora pri usilennom podkreplenii odnogo iz summiruemiykh razdrazhiteliy. (Summation of conditioned stimuli under conditions of active choice with heightened reinforcement of one of the summated stimuli.) In *Anokhin, P. K., Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 498-520.—The simultaneous presentation of 2 stimuli, each of which is dominant under given experimental conditions, both determines the course of subsequent reactions and, with increased reinforcement of one of the summated stimuli, brings about "disruption" of the reactions. The method of "active choice" was employed, and the experimental dogs were of the "strong" type of nervous system.—I. D. London.

3696. North, Alvin J. (Southern Methodist U., Dallas, Tex.) Improvement in successive discrimination reversals. *J. comp. physiol. Psychol.*, 1950, 43, 442-460.—Three theories of improvement in successive discrimination reversal were tested with 36 albino rats in a single-unit T-maze with a fixed pattern of shifting of food reward. The factors of amount of practice per condition of reinforcement, distribution of practice, and post-choice conditions of error correction were varied. Results showed improvement in reversal performance for all conditions. There were fewer consecutive errors under massed than under spaced practice. With both extended and delayed correction "there was an association between high initial interference during a reversal and apparently rapid subsequent improvement." Theoretical implications are discussed.—L. I. O'Kelly.

3697. North, Alvin J. (Southern Methodist U., Dallas, Tex.) Performance during an extended series of discrimination reversals. *J. comp. physiol. Psychol.*, 1950, 43, 461-470.—An attempt to get one-trial reversal of response in a single-unit T maze by extending reversal practice to from 24 to 48 reversals in addition to 12 reversals given in a previous experiment gave negative results, although in later trial a significant advantage appeared for massed practice. Theoretical implications are discussed.—L. I. O'Kelly.

3698. Sheffield, Fred D., & Roby, Thornton B. (Yale U., New Haven, Conn.) Reward value of a non-nutritive sweet taste. *J. comp. physiol. Psychol.*

chol., 1950, 43, 471-481.—After showing that hungry rats will ingest significantly more of a 1.3 gram/liter saccharine solution than sated control animals, the hungry rats were trained on a single unit T-maze with a saccharine solution reward. Learning was rapid and showed a high positive relation between correct choice and speed on the one hand and rate of ingestion of the saccharine reward on the other. After discussing the implications of these results for various learning theories, the authors conclude by suggesting "that elicitation of the consummatory response appears to be a more critical primary reinforcing factor in instrumental learning than the drive reduction subsequently achieved."—L. I. O'Kelly.

3699. Shumilina, A. I. Izuchenie eksperimental'nogo nevroza po sekretornomu i dvigatel'nomu pokazateliam uslovnoi reaktsii. (A study of experimental neurosis through the secretory and motor properties of the conditioned reaction.) In Anokhin, P. K., *Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 428-436.—Experimental neurosis may manifest a primarily motor or secretory character depending on the form of "mistake" to be taken as an index in the experiment. The method of study employed was that of "active choice."—I. D. London.

3700. Shumilina, A. I. Uslovnaia oboronitel'naia reaktsiia deafferentirovannoi konechnosti. (Conditioned defensive reaction of a de-afferented extremity.) In Anokhin, P. K., *Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 174-185.—Conditioned defensive reaction of de-afferented rear limb in dogs develops more quickly than conditioned reaction of opposite non-de-afferented fore limb. The latent period is shorter for the former than for the latter.—I. D. London.

3701. Tishan'kin, V. F. Izmeneniiia vysshei nervnoi deiatel'nosti pri razrushenii podkorkovykh obrazovanii. (Alterations of higher nervous activity on destruction of subcortical structures.) In Anokhin, P. K., *Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 281-298.—Controlled diathermic coagulation is a completely reliable method for local destruction of subcortical structures. The conditioned defensive motor reflex in dogs is a "complex, morpho-physiological formation," in which are included cortical and subcortical components that act as an integrated whole under ordinary conditions. Separate organically united components of the conditioned motor reflex can be observed on destruction of subcortical structures. The elimination of the extrapyramidal system provides the possibility of observing in pure form the pyramidal component of the conditioned motor reflex.—I. D. London.

3702. Tolmasskaiia, E. S. Issledovanie assoziativnoi deiatel'nosti golovnogo mozga pri raz'edinenii korkovykh zon. (An investigation of the associative activity of the brain under separation of the cortical zones.) In Anokhin, P. K., *Problemy*

vysshei nervnoi deiatel'nosti, (see 25: 3586), 306-318.

—The intracortical connections between the visual, auditory, and motor zones were severed in a dog in whom stable motor and salivary conditioned reflexes to intermittent light and a bell had previously been established. The study was conducted by means of the "secretory-motor method (active choice)." Intracortical severance of the zones in only one hemisphere brings about no observable effects. The picture changes when the two hemispheres are operated upon. The motor components of the conditioned reflex show up as more vulnerable than the secretory. The conclusion is drawn that the different forms of the conditioned reaction and its individual components are variously dependent on the cortex of the brain as a whole.—I. D. London.

3703. Tolmasskaiia, E. S. Osobennosti vysshei nervnoi deiatel'nosti v usloviakh uslozhennogo aktivnogo vybora. (Features of higher nervous activity under conditions of complicated active choice.) In Anokhin, P. K., *Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 439-450.—The method of "active choice" is employed, utilizing three instead of the usual two sides for feeding. Secretory-motor reflexes are formed as quickly for the third side as under conditions of two-sided feeding. When summing two oppositely directed conditioned stimuli, involving the visual and auditory analyzers, the conditioned reaction is always directed to the side associated with the sound stimulus. Under sharp discontinuous extinction the secretory component of the reaction disappears first and only later the motor component.—I. D. London.

3704. Tolmasskaiia, E. S. Tonkoe differentsirovaniye kachestvenno odinakovykh razdrazhiteli v usloviakh aktivnogo vybora. (Fine differentiation of qualitatively identical stimuli under conditions of active choice.) In Anokhin, P. K., *Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 351-359.—The differentiation of qualitatively related conditioned factors, associated with feeding on opposite sides, may proceed in the form of consecutive domination by two antagonistic excitatory complexes. The dissociation of the motor from the secretory components, expressed by the absence of effects of the former and the presence of those of the latter, is a regular stage encountered in differentiations under the conditions of the above experiment.—I. D. London.

3705. Woodbury, Charles B. (Oberlin Coll., O.) Double, triple and quadruple repetition in the white rat. *J. comp. physiol. Psychol.*, 1950, 43, 490-502.—Rats were trained in a linear maze, groups learning AABB, AAABBB and AAAABBBB patterns respectively, right and left initial-final sequences being varied by dividing each group. Learning difficulty was positively related to sequence-length, although not all animals learned the patterns. After detailed analysis of the data, "it is concluded that, in this situation at least, there is no essential difference between double alternation behavior based on internal processes of some sort, and other types of

serial response patterns." 21 references.—L. I. O'Kelly.

3706. Zachinieva, I. A. Neodnovremennaia summatsia uslovnykh razdrazhitel' podkrepliaemykh dvumia razlichnymi pishchevymi bezuslovnymi. (Non-simultaneous summation of conditioned stimuli, reinforced by two different alimentary unconditioned stimuli.) In *Anokhin, P. K., Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 491-497.—Employing the method of "active choice," it is shown that with non-simultaneous summation of the conditioned stimuli, bell (reinforcement by bread) is a much stronger stimulus than light (reinforcement by meat). The greater strength of the bell as a conditioned stimulus in comparison with light seems to depend on the fact that "the former is already quickly spread in the subcortical apparatus and [can thus] take over by means of its connections with the apparatus of motor reaction."—I. D. London.

3707. Zachinieva, I. A. Sootnoshenie dvigatel'nogo i sekretornogo komponentov uslovnoi reaktsii pri ekstremnom ugashenii. (The relation of the motor and secretory components of the conditioned reaction under complete extinction.) In *Anokhin, P. K., Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 371-386.—Comparison of secretory extinction with the different forms of motor extinction in the experimental dogs used demonstrates that antagonism between secretory and motor reactions is absent and that the animals react to each conditioned stimulus with an integrally whole conditioned reaction in which one group or another of its components predominates in accordance with the significance of this reaction. The method of study employed was that of "active choice."—I. D. London.

3708. Zachinieva, I. A. Summatsia dvukh uslovnykh razdrazhitel' podkrepliaemykh dvumia razlichnymi pishchevymi bezuslovnymi. (Summation of two conditioned stimuli, reinforced by two different alimentary unconditioned stimuli.) In *Anokhin, P. K., Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 476-490.—Employing the method of "active choice," it is shown that in summation of light and sound stimuli the complex of reactions, linked to the sound stimulus (bell), predominates even though reinforcement of the latter is applied by means of a much weaker unconditioned stimulus (bread instead of meat) as compared to reinforcement of the former. The course of the conditioned motor reactions in summation suggests that in the dog the sound analyzer is more subcorticalized and the light analyzer more corticalized. The experimental data tend to confirm the fact that "in simultaneous action of conditioned stimuli the character of the conditioned stimulus (the receptor and intensity involved) takes on major significance for the motor reaction, that is to say, the structural and phylogenetic properties of the conditioned stimulus, and not its unconditioned reinforcement, the latter coming to the fore in the

case of equalization of the intensities of the conditioned stimuli."—I. D. London.

3709. Zachinieva, I. A. Tipovye osobennosti uslovnoi dvigatel'nol reaktsii pri aktivnom vybore. (Typological features of the conditioned motor reaction.) In *Anokhin, P. K., Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 340-350.—Experimental data are adduced to show that the typological features of the motor and secretory components of the conditioned reaction require different approaches to them and different evaluation. If the motor component of the conditioned reaction be considered conjointly with the secretory component, new possibilities appear for characterizing type of nervous activity.—I. D. London.

3710. Zachinieva, I. A. Vyrabotka dinamicheskogo stereotypa na dvigatel'nykh uslovnykh reaktsiakh. (The development of a dynamic stereotype in motor conditioned reactions.) In *Anokhin, P. K., Problemy vysshei nervnoi deiatel'nosti*, (see 25: 3586), 521-539.—Experimental data show that "in the formation of a stereotype and in the actualization of a reaction to separate stimuli, different portions of the cortex and subcortex participate. A stereotype is brought into being through the cortex; and, to the degree that they are established, separate reactions, as they become more and more automatized, become primarily subcorticalized."—I. D. London.

3711. Zborovskaya, I. I. Osobennosti vyrabotki differentsirovok na komponenty posledovatel'nykh kompleksnykh uslovnykh razdrazhitel' (Features in the establishment of differentiations of consecutive complex conditioned stimuli into components.) *Fiziol. Zh. SSSR*, 1949, 35, 263-269.—The features observed in the establishment of differentiations of complex conditioned stimuli are described. They are said to demonstrate the "structural systematic character of the [required] solution of a difficult nervous task."—I. D. London.

(See also abstracts 3586, 3587, 3594, 3596, 3600, 3601, 3602, 3603, 3604, 3605, 3741, 3861, 4044, 4045, 4064, 4084, 4091, 4096, 4105, 4111)

THINKING & IMAGINATION

3712. Bastide, Roger. *Rêves des noirs*. (Dreams of negroes.) *Psyché*, 1950, 5, 802-811.—Several dreams reported by Brazilian Negroes of different socio-economic status are analyzed by the author. The goal of the analysis was to probe into the unconscious feelings of the negroes toward the whites. No generalization is possible because of the relatively small number of dreams analyzed, only 53.—G. Besnard.

3713. Guilford, J. P., Comrey, A. L., Green, R. F., & Christensen, P. R. A factor-analytic study of reasoning abilities. I. Hypothesis and description of tests; studies of aptitudes of high-level personnel. *Rep. Psychol. Lab. Univ. Southern Calif.*, 1950, No. 1, 23 p.—Sponsored by the Office of Naval Personnel,

the outline initiates an analysis of higher-level military ability, beginning with reasoning. It presents 34 samples of a battery to investigate 7 hypothetical factors. A table summarizes "predicted factor content."—R. Tyson.

3714. Meunier, Mario. *Les rêves de Valère Maxime.* (The dreams of Valere Maxime.) *Psyché*, 1950, 5, 793-801.—A series of extracts from Maxime's book "Des Faits et des Dits Memorables" (Memorable Acts and Deeds). Several dreams are reported which tend to show that future events were foretold in the dreams.—G. Besnard.

3715. Weiss, Frederick A. *Les forces constructives dans les rêves.* (The constructive forces in dreams.) *Psyché*, 1950, 5, 777-792.—Paul Bjerre's ideas relative to the Onirique process of dreams led to twelve stages. Each stage is discussed. The author points out that his own theories correspond only partly to the theories of Bjerre; too much emphasis being placed in Bjerre's theories on the therapeutic value of dreams. The therapeutic value of dreams, however, must not be overlooked though psychoanalytic treatment must be used as a catalyst.—G. Besnard.

3716. Woodworth, Hugh. *The nature and technique of understanding. Some fundamentals of semantics.* Vancouver, B. C.: Wrigley Printing Co., 1949. 142 p. \$4.00.—The author takes the position that meaning varies widely between individuals. This variation of meanings, although assumed to be closely similar, is of considerable significance to all who wish to understand themselves or others. Consciousness is viewed as being synonymous with experience. Sensations are not the same as the feelings or meanings which they evoke; the term "feeling" is coined to refer to the latter. Meaning, verbal meaning, dynamic experience and the kinesthetic sense are other subjects which are discussed. The kinesthetic sense is considered to be the most basic to consciousness but this sense is usually taken for granted or ignored.—H. R. Myklebust.

(See also abstracts 3626, 3735, 3778, 4065, 4068, 4099, 4102)

INTELLIGENCE

3717. [Bigelow, Maurice A.] *The IQ in education and eugenics.* *Eugen. News*, 1949, 34, 51-52.—The statement that the "upper classes" are more intelligent than the "lower classes" on the average, and that this results in lowering the average intelligence in the whole population, is challenged. Studies by Allison Davis are cited which call attention to our failure to develop at all fully the potential mental ability of the 60% of our lower socio-economic groups. Also cited is Dr. Davis' claim that "we need an intelligence test which will identify the real mental ability equally well for all socio-economic groups in our country." The *eugenic idea* should be directed to finding and developing individual carriers of superior genes, encouraging

their matings, and improving environment for their better development.—G. C. Schwesinger.

3718. Burt, Cyril. (*Univ. Coll., London, Eng.*) *Eugenics: intelligence and genius.* *Brit. med. Bull.*, 1949, 6 (1-2), 78-79.—The essential findings in Godfrey Thomson's "The Trend of National Intelligence" and in Lewis M. Terman's "The Gifted Child Grows Up" are briefly indicated.—F. C. Sumner.

PERSONALITY

3719. Abbe, Mag. *Hotenkinchō no hiryōkika shinrigakuteki kenkyū.* (A topological study of compensatory tension.) *Jap. J. Psychol.*, 1948, 19, 83-86.—A Lewinian-type outline of the structure and development of the personality is presented with particular reference to the operation of compensatory forces, of which several types are distinguished. A study is made of the mutual personality rating performance of 13 to 18 year old children and is interpreted in these terms.—W. F. Day.

3720. Allport, Gordon W. (*Harvard U., Cambridge, Mass.*) *The nature of personality: selected papers.* Cambridge, Mass.: Addison-Wesley press, 1950. vii, 220 p. \$2.50.—A reprinting of 11 articles which represent clarifications or amplifications of the theory presented in "Personality: a psychological interpretation" (1937). The author's preface serves to introduce and give continuity to the papers. A chronological bibliography of Allport's works 1921-1950.—A. J. Sprow.

3721. Almberg, Nils. *Temperamentetiran i Corpus Hippocraticum.* (The temperament doctrine in the Corpus Hippocraticum.) Stockholm: C. W. K. Gleerup, 1950, 128 p. Kr. 6:50.—In part 1, the antecedents of the temperament doctrine in early Greek natural philosophy are discussed. Part 2 deals with the classical temperament doctrine: the 4 humors, their psychological effects, etc., as found in the writings of Hippocrates. And part 3 considers various speculations concerning the relation between national character (temperament) and physical milieu, and between bodily form and disposition. 96-item bibliography.—A. Tejler.

3722. MacKinnon, Donald W. (*U. California, Berkeley.*) *Personality.* *Annu. Rev. Psychol.*, 1950, 2, 113-136.—A review of literature between June 1949 and 1950 under major headings of: definition, methods of study, development, and dynamics of personality. 73-item bibliography.—C. M. Louttit.

3723. Matsumura, K. *Seikaku no kenkyū—kenkyūhō no isslian.* (The study of personality: a proposed method.) *Jap. J. Psychol.*, 1948, 19, 132-135.—The concept of personality is distinguished from those of will and individuality in the "method of process analysis," a proposed approach to the study of personality. It is suggested that the dynamics of the personality can be revealed by an analysis of the written completion of unfinished ego-involving stories.—W. F. Day.

3724. Solms, Hugo. (*U. Clinic, Basel, Switzerland.*) *Die Beziehungen des "Hydergin-Glukose-*

Tests" zu Psyche und Körperbau. (The relations of the "hydergin-glucose-test" to psyche and physique.) *Schweiz. Arch. Neurol Psychiat.*, 1950, 65, 311-329.—The pharmacodynamic relations of the ergotic alkaloid, hydergin, to types of physique and also to the psychic, i.e., affective tone were investigated. 33 simple per oral glucose-tolerance-tests and 30 hydergin-glucose-tests were carried out on 14 extreme types of physiques (pyknic and leptosome-asthenic). The pyknic showed a distinctly weaker hyperglycemia-inhibition than did the leptosomes. In these extreme types, psychic structure, result of the vegetative hydergin-glucose-test, and physique correlated very closely.—F. C. Sumner.

3725. Zacharias, H. C. E. *Human personality, its historical emergence in India, China, and Israel.* St. Louis: Herder, 1950. viii, 360 p. \$4.00.—The emergence of the human personality is treated with reference to the civilizations of India, China, and Israel. The author contends that in earlier stages of civilization the individual remained submerged in the group and failed to see himself as contrasted with the society to which he belonged. In India, China, and Israel there appeared the self-consciousness and reflection necessary for the development of personality.—P. E. Lichtenstein.

(See also abstracts 3522, 3809, 4060, 4065, 4098, 4105, 4108)

AESTHETICS

3726. Aiken, Henry David. (*Harvard U., Cambridge, Mass.*) *A pluralistic analysis of aesthetic value.* *Phil. Rev.*, N. Y., 1950, 59, 493-513.—The author points out that "no description of the content of a work of art and no judgments of either its intrinsic or its inherent value establishes, *per se*, any normative claims upon the rest of us to conform our tastes or appraisals to it. Nor is there any logically or empirically demonstrable reason why we *should* acquire or limit ourselves to the inherent values, which, for our time and in our situation, may reside in works of art." His conclusions are best summarized in the conclusion that "the aesthetic value of a work of art arises not from any decision or act of choice but from enlivening joy which comes, when it comes, largely involuntarily from our immediate response to the object itself."—M. A. Seidenfeld.

3727. Corso, John F., & Lewis, Don. (*State U. Iowa, Iowa City.*) Preferred rate and extent of the frequency vibrato. *J. appl. Psychol.*, 1950, 34, 206-212.—The study was designed (1) to measure the preferred combination of rate and extent in the frequency vibrato of a complex tone at each of the 5 octave levels in the equal-tempered scale for musically untrained individuals, and (2) to discover the manner in which vibrato preferences varied with the subjects' musical training or musical ability as represented by scores on the performance tests. The

methods and instruments used and the results are discussed in detail. 14 references.—C. G. Browne.

3728. Šakobson, P. M. *O professe raboty aktéra nad rol'yu.* (On the actor's process of working over his role.) *Izv. Akad. pedag. Nauk RSFSR*, 1950, No. 25, 117-170.—An analysis of the creative comprehension by an actor of his role is presented. The above study is based on conversational, autobiographical, and literary material, and the concepts of the Soviet actor, Stanislavskii, are regarded as basic to the author's analysis. The unity of art and "correct political outlook" is affirmed as fundamental to the "highest understanding and execution" of any given role by the Soviet actor.—I. D. London.

3729. Ignat'ev, E. I. *Voprosy psichologicheskogo analiza professa risovaniia.* (Problems in the psychological analysis of the process of drawing.) *Izv. Akad. pedag. Nauk RSFSR*, 1950, No. 25, 71-116.—The drawings of adults and children of various ages are analyzed as regards the process of their execution; a "cross-sectional method" being employed which by periodic removals of carbon copies from under the original drawing permits one to follow the course of drawing in retrospect. The various changes in drawing techniques are traced as they are invoked by new conceptions of the task implied in drawing. Children's drawings do not reflect their perception of the world as much as they do their conception of the task implied in drawing. Teaching drawing does not hamper "spontaneity," but sharpens perception and changes the child's conception of the task implied in drawing.—I. D. London.

3730. Sachs, Hanns. (*Harvard Med. Sch., Cambridge, Mass.*) *The creative unconscious; studies in the psychoanalysis of art.* (2nd ed.) Cambridge, Mass.: Sci-Art Publishers, 1951. 358 p. \$5.00.—(See 16: 3707.) Four new papers have been added to this edition. They are: "The Tempest," "The Unconscious in Carl Spitteler's Characters," "What Would Have Happened If . . . ?" and "Creativeness in the Obsessional Ritual."—N. H. Pronko.

3731. Vitsinskii, A. V. *Psichologicheskii analiz professa raboty pianista-ispolnitelia nad muzykal'nym proizvedeniem.* (Psychological analysis of the pianist's process of working over a musical composition.) *Izv. Akad. pedag. Nauk RSFSR*, 1950, No. 25, 171-215.—There are two major approaches employed by pianists in working over a composition. The first consists of more or less linked stages: (1) "preliminary conception of the musical image as a whole," (2) "solution of purely technical problems, associated with automatization," and (3) "synthesis of the 2 preceding stages" and final readying for performance. The second approach is not broken into stages but is one "where the solution of technical problems proceeds continuously with that of the artistic problems" inherent in the musical composition.—I. D. London.

(See also abstracts 3642, 4075)

DEVELOPMENTAL PSYCHOLOGY

CHILDHOOD & ADOLESCENCE

3732. Barker, Roger G. (*U. Kansas, Lawrence.*) **Child psychology.** *Annu. Rev. Psychol.*, 1951, 2, 1-22.—Literature on child psychology for 1949 and early 1950 is reviewed. The author believes that "child psychology in 1950 is not only widely dispersed and nonprofessional, but except as a teaching field and a therapeutic speciality, it lacks vigor." 69-item bibliography.—C. M. Louttit.

3733. Birnbaum, Ferdinand. **Mahnung, Warnung, Drohung.** (*Admonition, warning, and threat.*) *Int. Z. Indiv.-Psychol.*, 1949, 18, 173-176.—Exhortative admonitions can be successful and valuable training with children if in accordance with the child's wish. The child must realize the admonition just and not be aroused to defiance by over-emphasis. As is the case with warnings and threats, admonitions must be part of an understanding approach to the training of the child. English and French summaries.—C. T. Bever.

3734. Cederquist, Helen T. **The "good mother" and her children.** *Smith Coll. Stud. soc. Wk.*, 1948, 19(1), 1-26.—Emotionally secure ("good") mothers were found to be similar in that they (1) demonstrated sincere love for their children, (2) respected their children as individuals and avoided pressuring them, (3) tolerated a good deal of childish mischief and disruption of their planned routines, (4) devoted themselves completely to their families and their children, and (5) were essentially free of anxiety regarding their attitudes towards their children and the effects of these attitudes on the eventual development of the offspring.—G. Elias.

3735. Chernikova, N. A. **Ocherki v psichologii literaturnogo tvorchestva podrostkov.** (*Essays on the psychology of literary creativity in adolescents.*) *Izv. Akad. pedag. Nauk RSFSR*, 1950, No. 25, 49-70.—Binet's typological characterization of the mind as being either objective or subjective is denied, and the literary work of three Soviet adolescents is analyzed to show the inadequacy of this typology which is attributed to the bourgeois psychology of the capitalist world. The concluding discussion asserts that there is evidence of activity, preliminary and necessary to the creative act, in adolescents as in adults.—I. D. London.

3736. Ernst, C. J. **Aus der Erziehungspraxis.** (*From an educational practice.*) *Int. Z. Indiv.-Psychol.*, 1949, 18, 176-181.—Educational guidance was conducted by mail—advisable only when a personal interview with a psychologist is not possible—with the family of a 3 year old girl, mother and grandmother, father away at war. Upon his return the child showed him marked hostility. The family was counseled that she should receive neither urging to love her father, nor loss of love for her hostile attitude, but rather, by calm attentions, she should be reassured that her circle had only widened. English and French summaries.—C. T. Bever.

3737. Fulchignoni, E. (*U. Rome, Italy.*) **Filmologia e psicologia infantil.** (*Filmology and child psychology.*) *Arch. bras. Psicotécnica*, 1950, 2(2), 59-66.—In the light of the literature and the author's observations the psychological influence of movies upon children is discussed under the following captions: the motion picture for adults and child psychology; the perception of the motion picture in the adult and in the child; the different phases of syncretism for social interests; affective reactions to the motion picture. The author sees extraordinary possibilities for investigating the personality of spectators deducible from his study. English summary.—F. C. Sumner.

3738. Hopkirk, Mary. **Nobody wanted Sam. The story of the unwelcomed child, 1530-1948.** London: Murray, 1949, xii, 187 p. 15s.—Sam is the unwelcomed illegitimate child. The author outlines the history of his lot in Great Britain from Tudor times to the Children's Act of 1948. There are described the fever-ridden parochial poor-house, the grim Victorian Union workhouse, and the "horrors of so-called 'apprenticeship' in the mills, mines, ships, and chimneys of Britain." The long history of Parliamentary struggles on behalf of the defenseless infant, the naive legislation intended to discourage extra-marital parenthood, and the early attempts by private charity to salvage foundlings are described. 2-page bibliography.—C. M. Louttit.

3739. International Council for the Mental Health of Children. **Mental health of children in the world of today. International reports.** *Nerv. Child.*, 1950, 8, 409-518.—Under the editorship of Leo Kanner, who writes an introduction, reports on the conditions of mental health activities for children in 14 countries are presented. The countries and authors of the reports are: Mexico (Jose Peinado Altable), Argentina (Telma Reca de Acosta), Brazil (Iracy Doyle), Sweden (Torsten Ramer), Norway (Bard Brekke), Denmark (Karen M. Simonsen), Finland (Kaisa Leppo), England (Muriel Barton Hall), Holland (L. van der Horst), Spain (Julia Corominas), Poland (Stefan Baley), South Africa (S. Mansvelt), India (J. C. Das Gupta), New Zealand (E. Beaglehole and J. Ferguson).—G. S. Speer.

3740. Jackson, Lydia. **Emotional attitudes towards the family of normal, neurotic and delinquent children. Part I.** *Brit. J. Psychol.*, 1950, 41, 35-51.—A picture projection test, devised by the author, was used to test the hypothesis that within a group of children "... the conflicts which manifested themselves in neurotic symptoms and in delinquent behavior were associated with disturbances in parent-child relationships." Neurotic and delinquent children gave responses which differed from each other and from the responses of normal children in ways which may be important in prophylactic and therapeutic practice.—L. E. Thune.

3741. Kasatkin, N. I. **Rannie uslovnye refleksy v ontogeneze cheloveka.** (*Early conditioned reflexes in human ontogenesis.*) Moscow: USSR Acad. Med. Sci., 1948. 192 p. 13 rub.—A large number of

conditioning experiments on the fetus, baby, and young child are reported and discussed. Separate chapters are devoted to the auditory, visual, olfactory, and tactile conditioned reflexes.—I. D. London.

3742. Kingsley, Alice, & Reynolds, Earle L. The relation of illness patterns in children to ordinal position in the family. *J. Pediat.*, 1949, 35, 17-24.—The illnesses which occurred during the first 5 years of life of 101 children studied at the Fels Foundation were classified into 14 illness categories. The data were analyzed to compare the illnesses of (1) 22 only children, 34 oldest children, and 33 second oldest children; and (2) 29 pairs of oldest and second oldest children in the same family. Only children show the highest mean incidence of gastrointestinal upsets, skin disorders, feeding disorders, constipation, asthma and allergies. Second children lead in respiratory and ear infections, tonsillitis, whooping cough, diarrhea, accidents and enuresis. Oldest children do not show the highest mean incidence in any of the illness categories studied. Hypotheses are suggested to account for the distribution obtained.—M. C. Templin.

3743. Leites, N. S. Sklonnost' k trudu kak faktor odarennosti. (Inclination for work as a factor of giftedness.) *Izv. Akad. pedag. Nauk RSFSR*, 1950, No. 25, 7-48.—On the basis of a study of 3 gifted children over a long period of time it is concluded that "the secret of giftedness in children is their heightened inclination for work."—I. D. London.

3744. Mechinskaia, K. G. Vospitanie tovarishchestvikh otnoshenii v igre. (The training in friendly relationships through play.) *Doshkol'noe Vospitanie*, 1950, I (Jan.), 21-26.—Imbued with the belief that training in friendly relationships among children is vital to the personality development of future citizens of a communist society, the authoress utilized free play for the promotion of such relationships among a group of kindergarten children. The guiding principle in this procedure was to help each child to attain the particular characteristic in which it was lacking in its relationship with the other children: co-operation, group spirit, ability to share, to recognize the rights of others, to assert one's self, to gain the esteem of the group, etc. The co-operation of the parents was elicited during the teacher's frequent conferences with them. The teacher often became a member of the play-group in order to facilitate smooth interrelationships.—M. G. Nemets.

3745. Metraux, Ruth W. (U. Puerto Rico, San Juan.) Speech profiles of the pre-school child 18 to 54 months. *J. Speech Hearing Disorders*, 1950, 15, 37-53.—207 children at 7 pre-school ages were studied by means of the Gesell elemental schedule and a phonetic transcript of all replies and all speech the child used during examination. There are clear factors involved at each of these levels which appear to be characteristic for each of these age levels. Some of the items are necessarily subjective, such as voice. The speech therapist should be able to

recognize the stage of development of the speech of any child.—M. F. Palmer.

3746. Plottke, Paul. The child and his name. *Indiv. Psychol. Bull.*, 1950, 8, 150-157.—To test the validity of conclusions derived from a prior study (see 21: 3145), the author analyzed compositions on "Myself and my name" written by 50 female French students, 12 to 14 years of age. Several suggestions are offered regarding the role of the educator in dealing with the individual's attitude toward his name. The teacher is in a position to "... contribute to the social reorientation of children whose attitudes toward their names reveals fictitious ideas of inferiority-superiority."—A. R. Howard.

3747. Schwarzmann, Julia. Die seelische Heimatlosigkeit im Kindesalter und ihre Auswirkungen. (The lack of emotional security in childhood and its consequences.) Schwarzenburg, Switzerland: Gerber-Buchdruck, 1948. 108 p. Fr. 5.—According to the author, one has to differentiate between the child's physical environment, his psychological environment, and the lack of emotional security in the environment. For this last concept she coins the term "seelische Heimatlosigkeit." She gives 5 case histories of children who suffer "seelische Heimatlosigkeit" and because of this are severely maladjusted. She also points to the important relationship between the lack of emotional security in the environment and the experience of anxiety in childhood.—E. Barschak.

3748. [Sundgaard, Arnold.] The miracle of growth. Urbana, Ill.: University of Illinois Press, 1950. 73 p. \$2.00. (\$1.25 paper.)—The exhibit of the Museum of Science and Industry (Chicago) developed in collaboration with the U. of Illinois Professional Colleges entitled "The Miracle of Growth" forms the basis for the illustrations of this volume about which the text is written. The physical development of foetus and child and the behavioral development of the child through adolescence are described. Questions on growth commonly asked are answered.—C. M. Louitt.

3749. Sutcliffe, A. (County Borough of Lincoln, Eng.), & Canham, J. W. The height and weight of boys and girls. London: John Murray, 1950. 80 p.—Age averages in measurements of height and weight based on 17,000 English boys and girls from 5 to 17 years of age are reported and growth curves are given. Methods of finding a pupil's height quotient and his weight quotient and some uses to be made of intelligence, height, weight, and educational indices are explained.—F. C. Sumner.

(See also abstracts 3729, 3905, 4056, 4063, 4070, 4071, 4095, 4101)

MATURITY & OLD AGE

3750. Affleck, James W. (St. James Hosp., Leeds, Eng.) Personality factors in the mental disorders of old age. *Med. Pr.*, 1949, 222(17), 422-424.—Symptoms of senile psychoses, social strains of

aging, psychopathology in senile mental disorders, correlation of physical pathology and mental symptoms, principles of management are topics discussed here. Well-balanced personalities, hereditarily and adaptively speaking, are the major factors in determining mental health in senescence.—*F. C. Sumner.*

3751. Amulree, Lord. (*U. Coll. Hosp., London, Eng.*) *The employment of elderly workers.* *Practitioner*, 1950, 165, 111-114.—The author discusses ways and means whereby the elderly if competent physically, mentally, and vocationally should be given opportunity to work. Elderly workers should not be made to feel that the usual conditions of work are being obviously altered for their benefit. They may, however, be allowed to arrive at work a little late and to leave a little early in order to avoid rush hours. It is more difficult to find work for the elderly worker who has left his employment than for one who merely needs a change. Most difficult of all is it to find a new job for the elderly man or woman of the executive or managerial grade.—*F. C. Sumner.*

3752. Burstein, Sona Rosa. (*Wellcome Historical Med. Museum, London, Eng.*) *Aspects of the psychopathology of old age revealed in witchcraft cases of the sixteenth and seventeenth centuries.* *Brit. med. Bull.*, 1949, 6(1-2), 63-71; 72.—A goodly proportion of those accused and convicted of being witches during the 16th and 17th centuries were old women. The author adduces evidence as to the characteristic senile behavior of suspected "witches." Contemporary interpretation of the behavior of supposed witches and modern medical interpretation are to the effect that the behavior in question on the part of the supposed witches is to be understood in the light of the psychopathology of old age. The author also reviews explanations relying on psychological and social sources of prejudice against old women. 117-item bibliography.—*F. C. Sumner.*

3753. Ginzberg, Raphael. *The aging and the aged; psychological and social aspects.* *Indiv. Psychol. Bull.*, 1950, 8, 117-130.—In the face of population increases among older age groups, "our basic psychological attitude . . . is essentially negative." Despite cultural differences "in surface reactions" toward the aged, "there is a certain uniformity of inner motivation." In western societies, conflict arises between "unconscious rejection" and moral and legal obligation. The goal of utilizing the abilities of the aged can be achieved through adjustment of the individual to society's requirements and vice versa.—*A. R. Howard.*

3754. Post, Felix. (*Maudsley Hosp., London, Eng.*) *Mental aspects of senescence.* *Brit. med. Bull.*, 1949, 6(1-2), 54-57.—A survey of recent studies of mental aspects of senescence in England is made.—*F. C. Sumner.*

3755. Shock, Nathan W. (*Natl. Inst. Hlh., Bethesda, Md.*) *Gerontology (later maturity).* *Annu. Rev. Psychol.*, 1951, 2, 353-370.—The literature of the period January 1947 to June 1950 is reviewed under the major headings: perception, motor re-

sponse, intelligence, and personality and social adjustment. 146-item bibliography.—*C. M. Louitt.*

SOCIAL PSYCHOLOGY

3756. Chapin, F. Stuart. (*U. Minnesota, Minneapolis.*) *Sociometric stars as isolates.* *Amer. J. Sociol.*, 1950, 56, 263-267.—Conventional sociometric diagrams represent "stars" or leaders as the persons most often chosen as the center of a circle of admiring friends. When the data of such heuristic diagrams consist of (1) number of incoming choices; (2) number of outgoing choices; and (3) social status scores or some other rating, and are plotted in a three-dimensional model, instead of drawn on a two-dimensional flat surface, the "stars" no longer appear as in the center but as on the periphery of the total group structures. Thus, in social space (not mere direction of choices), "stars" conform to Cooley's concept of the isolation of the leader.—*D. L. Glick.*

3757. Dombrose, Lawrence A., & Levinson, Daniel J. (*Western Reserve U., Cleveland, O.*) *Ideological "militancy" and "pacifism" in democratic individuals.* *J. soc. Psychol.*, 1950, 32, 101-113.—The attitudes of 40 "democratic" subjects (low scorers on the Ethnocentrism or E Scale of the U. California Public Opinion Study) were measured by an Ideological Militancy-Pacifism (IMP) Scale. From a correlation of .74 between IMP and E, it was concluded that those who strongly reject ethnocentrism tend toward militancy whereas those who moderately reject ethnocentrism tend toward pacifistic approaches. The correlation of .67 between the IMP and F Scales suggests differences in personality between the militant lows and the pacifistic lows.—*J. C. Franklin.*

3758. Dulsky, Stanley G. (*Chicago (Ill.) Psychological Inst.*) *Improving conference leadership.* *Personnel*, 1950, 27, 189-193.—Suggestions for improving conference leadership are given, and the basic psychological principles involved are analyzed: (1) Encourage sounding-off; (2) promote discussion and active cooperation, especially by the use of open-end questions and frequent summaries; (3) encourage self-confidence, especially that of reticent members; (4) promote competition for the purpose of bringing out both sides of a problem; (5) reflect frequently both content and feeling in order to clarify and to draw out further discussion.—*L. N. Mendes.*

3759. Hemphill, John K. (*Ohio State U., Columbus.*) *Relations between the size of the group and the behavior of "superior" leaders.* *J. soc. Psychol.*, 1950, 32, 11-22.—The frequency with which leaders of groups of 31 members or more engaged in specified items of [leadership] behavior has been compared with the frequency with which leaders of groups of 30 or less members engage in them. "Within the limits imposed by the questionnaire method," it was concluded "that the size of the group is a variable which to some degree conditions leader

behavior." The following hypotheses are offered: "(1) As the group becomes larger, demands upon the leader's role become greater and more numerous; (2) As the group increases in size, tolerance for leader-centered direction of group activities becomes greater."—J. C. Franklin.

3760. Katz, Daniel. (*U. Michigan, Ann Arbor.*) Social psychology and group processes. *Annu. Rev. Psychol.*, 1951, 2, 137-172.—A review of the 1949-1950 literature on perceptual selection, suggestion, leadership, conference interaction process, group dynamics, action research, intergroup tension, group conflicts and morale, social structure, propaganda, opinion and attitude research. 101-item bibliography.—C. M. Louttit.

3761. Kiser, Clyde V., & Whelpton, P. K. Number of children in relation to fertility planning and socio-economic status. *Eugen. News*, 1949, 34, 33-43.—Some 23 hypotheses were tested concerning the extent of family planning and the size of planned families in relations to a variety of social and psychological conditions. The data, obtained by personal interviews with some 1977 couples, show a direct relationship between fertility and socio-economic status for the group who planned for the number and spacing of their children; and an inverse relationship for the group who had more children than they wanted.—G. C. Schwesinger.

3762. Morgan, Arthur E. A laboratory case in urban survival: the Parsis of Bombay. *Eugen. News*, 1950, 35, 3-5.—Because urban families tend to die out in a few generations and because the Parsis provide an exceptional opportunity for studying a superior and almost pure racial strain, one that has recently migrated to the city of Bombay after centuries of rural living, their replacement values afford great interest to populationists. From 1881 to 1941, in spite of continual accretions from villages and elsewhere, the Parsi population in Bombay increased by only 11,000, almost 50% below the general replacement level in India. Indirect evidence, too, indicates that qualitatively the Parsis are losing their former mental and physical vigor.—G. C. Schwesinger.

3763. Nettler, Gwynne. (*Santa Barbara Coll., Calif.*) A note on the notion of a "scientific morality." *J. soc. Psychol.*, 1950, 32, 115-118.—In evaluation of Chein's and Cantril's attempts "to establish a scientific basis for the determination of moral conduct and, in so doing, define morality" the author argues that the "Cantril-Chein criterion of moral action is neither grounded in science, as claimed, nor does it provide us with a suitable index of good behavior." Moreover, "the dangerous parts of Cantril's thesis are his denial of impartiality to scientific method, his confusion of the roles of scientist and moralist, and his urging of a personal morality as scientifically determined."—J. C. Franklin.

3764. Neumann, Johannes. *Macht und Liebe.* (Power and love.) *Int. Z. Indiv.-Psychol.*, 1949, 18, 155-166.—In light of the fact that the technical

sciences have reached a stage of development such that they threaten to destroy mankind, the author suggests the introduction of a psychological age. Psychological knowledge should be able to eliminate the disease of power and subsequent violence in education and politics, substituting respect and love in interpersonal dealings. A science of psychopolitics is proposed as a project for research. English and French summaries.—C. T. Bever.

3765. Roosevelt, Eleanor, et al. *Colgate Lectures in Human Relations 1949.* Hamilton, N. Y.: Colgate University, 1949. 17 p.—The substance of three lectures comprise this volume. Mrs. Eleanor Roosevelt on "The Human Factor in the Development of International Understanding," William C. Bullitt on "The Human Factor Plays its Part in Two World Wars" and Dr. Ralph J. Bunche on "United Nations Intervention in Palestine." Mrs. Roosevelt's talk concerns the difficulties met in formulating the Universal Declaration of Human Rights. It is a detailed analysis of the language and meaning difficulties involved in committee work with special emphasis on the role of national differences. Bullitt's talk is an analysis of the way Wilson and Roosevelt met difficult problems and made decisions. He stresses the role of personality, health and social relationships. Bunche's lecture is a review of the various stages involved in settling the Palestine War and he stresses the crucial importance of character and temperament where information is lacking and decisions must be made.—R. A. Littman.

3766. Sicher, Lydia. *Freedom or liberty.* *Int. Z. Indiv.-Psychol.*, 1949, 18, 166-173.—A semantic investigation of these two words discovers significant differences between them. Liberty can be corrupted to license, the latter a privilege bought for a price and a grave social menace once turned to egocentric uses. Liberty is something to have, therefore something which can be taken away, while freedom is a state of mind which can exist even for the individual who has no liberty. Therein lies the fallacy of the idea that having things brings freedom whereas actually the state of mind must be attained by the individual within himself. The world will thus be at peace only through true individual freedom integrating itself into the "world of all." German and French summaries.—C. T. Bever.

3767. Weschler, Irving R. (*U. Calif., Los Angeles.*) A follow-up study on the measurement of attitudes toward labor and management by means of the error-choice method: II. *J. soc. Psychol.*, 1950, 32, 63-69.—A revised form of the Labor Relations Information Inventory was validated on a group of advanced University students and by a sample of management people, labor union officials and members, and labor mediators. Study of reliability was made with Form A and the revised Form B and with test-retest administration of Form B. While reliability coefficients were low, direction of attitude measures showed consistency. Examination of the reliability coefficients indicated that the "error-choice" labor-management attitude

test while a good measurement technique would have to be constantly revised to take cognizance of the latest developments in the field of labor relations. Suggestions for avoiding methodological mistakes in further "error-choice" measurement are included.—*J. C. Franklin.*

3768. Zilboorg, Gregory. Authority and leadership. *Bull. World Fed. ment. Hlth.*, 1950, 2(5), 13-17.—Without psychological and moral authority, physical force proves ineffective in maintaining authority. Regarding the leaders who wield the authority of physical force, of psychological, and of moral kinds, we cannot now assume that "only so-called psychologically normal leaders are capable of good and wise leadership, and that only this hypothetically normal leadership is capable of bringing about a desirable social order." In our society the greater the authority of a given leader, the more sheltered he is from the impacts of reality. "This being the case, it would seem incumbent upon us to try to clarify to the maximum possible extent this rather paradoxical psychological state, which seems to relieve one of the actual sense of responsibility in the proportion to which we endow one with the authority and right to leadership."—*J. C. Franklin.*

3769. Znaniecki, Florian, (U. Illinois, Urbana.) European and American sociology after two World Wars. *Amer. J. Sociol.*, 1950, 56, 217-221.—The suppression of sociology in Europe by adherents of several conflicting ideologies indicates that sociology is practically important precisely because it is an objective science. The two world wars made social thinkers realize the growing interdependence between cultures manifested in the causal and functional relationships between diverse social groups. A study of such social groups all over the world thus becomes the main function of sociology. This function requires changes in methods. Since social groups are cultural systems, the naturalistic approach to social phenomena must be eliminated. Since they are dynamic systems and their relations continually change, the antithesis between statics and dynamics must be solved.—*D. L. Glick.*

(See also abstracts 3670, 3981, 4055, 4058, 4094)

METHODS & MEASUREMENTS

3770. Makita, M. Seron chōsa ni okeru nintchūshutsuhō (random sampling) to shitsumonhō ni kansuru kōsatsu. (A consideration of questionnaires and methods of random sampling in public opinion survey.) *Jap. J. Psychol.*, 1948, 19, 87-96.—The measurement of public opinion in Japan by questionnaires and methods of random sampling is surveyed. Specific illustrations of polling procedures for sampling the residents of Tokyo Prefecture, the members of the Japanese House of Representatives, and the population of Japanese housewives are given and discussed. The characteristics of several types of questionnaires in current use are described.—*W. F. Day.*

3771. Weschler, Irving R. (U. Calif., Los Angeles.) An investigation of attitudes toward labor and management by means of the error-choice method: *I. J. soc. Psychol.*, 1950, 32, 51-62.—To verify hypotheses "concerning the 'error-choice' method of attitude measurement . . . an inventory was constructed . . . under the guise of an information test on labor-management relations—certain items of which were intended to elicit constant errors in the direction of the subject's known bias toward labor or management." Analysis of results of administration of this test to 186 advanced University students confirmed the hypotheses. Sex and age were not related to inventory scores but income, political preference, and labor affiliation were. Those scoring 'pro-labor' significantly more often answered the factual items of the inventory correctly.—*J. C. Franklin.*

CULTURES & CULTURAL RELATIONS

3772. Bienenstok, Theodore. Social life and authority in the east European Jewish shtetl community. *Sth. J. Anthropol.*, 1950, 6, 238-254.—The shtetl is bound together by the laws of the Torah and gentile restrictions. The resulting poverty is partially offset by community solidarity where prestige accrues to those who acknowledge obligations to help the less fortunate. The necessity for validation of status together with opportunities for individual achievement and leeway for individual definition of proper conduct make authority dependent upon recognition rather than coercive power.—*L. M. Hanks, Jr.*

3773. Luchins, Abraham S. (McGill U., Montreal, Can.) Personality and prejudice: a critique. *J. soc. Psychol.*, 1950, 32, 79-94.—This is an extended criticism of a body of research on the ethnically prejudiced and the anti-democratic personality published by Frenkel-Brunswik, Levinson, Sanford, et al. The author points out what he regards as numerous serious internal weaknesses in methodology and handling of data. Chiefly, he argues against overall orientational inadequacies of the research which he believes stem from its "class-oriented rather field-theoretical approach." In addition, Luchins argues that the psychoanalytic bias was permitted to unduly influence the hypotheses, procedures, and interpretation of the findings.—*J. C. Franklin.*

3774. Mills, C. Wright; Senior, Clarence, & Goldsen, Rose Kohn. (Columbia U., New York.) The Puerto Rican journey; New York's newest migrants. New York: Harper, 1950. xi, 238 p. \$3.00.—Life in Puerto Rico is compared to that of the Puerto Rican immigrants in New York City. Their skills, culture, motivation in coming, their conflicts and tensions in a new environment, their economic and occupational life are surveyed. Their limited job mobility and homogeneity operate to level off their ambition and imaginative life.—*G. K. Morlan.*

3775. Minnesota. Governor's Interracial Commission. *Race relations in Minnesota*. St. Paul, Minn.: Author, 1948. 278 p.—This series of reports are from 4 commissions the first starting in 1943. Social, vocational, and other aspects of conditions of Negroes, Indians, and Mexicans are considered. The Commission finds definite prejudice against Negroes in the matter of job opportunities. All three groups are found to live below the level of economic security.—*G. K. Morlan*.

3776. Oakley, Kenneth P. *Man the tool-maker*. (2nd ed.) London: British Museum, 1950. vi, 98 p. 2s. 6d.—Lacking more immediate evidence artifacts afford a basis for inferring characteristics of human behavior. This monograph describes stone tools fashioned by ancient man, describes possible methods of fabrication, and in a final chapter essays a description of the life and behavior of stone-age man.—*C. M. Louttit*.

3777. Prothro, E. Terry, & Jensen, John A. (U. Tennessee, Knoxville.) *Interrelations of religious and ethnic attitudes in selected southern populations*. *J. soc. Psychol.*, 1950, 32, 45-49.—The authors "examined the intercorrelations among attitudes toward the church, Negro, and Jew of 652 students in six southern colleges. . . . the students studied had a very favorable attitude toward the church [and] exhibited fairly favorable attitudes toward the Jew, and less favorable attitudes toward the Negro. Catholics and Protestants responded similarly. There was a slight tendency for those persons more favorable toward the church to be more favorable toward the Negro and Jew. For each of the six groups there is a statistically significant relationship between favorable attitude toward the Negro and favorable attitude toward the Jew, but this relationship is considerably less than that found in previous studies of other populations."—*J. C. Franklin*.

3778. Sebeok, Thomas A. *Cheremis dream portents*. *Sth. J. Anthropol.*, 1950, 6, 273-285.—Forty-three dream symbols are related to their meanings for daily life in Cheremis culture, found in the Mari Autonomous Soviet Socialist Republic. Though evidence is insufficient for psychoanalytic interpretations, similarities of symbols are shown to exist with the neighboring Chervash.—*L. M. Hanks, Jr.*

(See also abstract 3834)

SOCIAL INSTITUTIONS

3779. Birch, A. H., & Campbell, Peter. *Voting behaviour in a Lancashire constituency*. *Brit. J. Sociol.*, 1950, 1, 197-208.—This is a British study of factors involved in voting characteristics in a sample of 500 electors. Results showed that (1) class, age, and sex play a reliable part in determining the party voted for; (2) floating voters are a cross-section of the total population in the constituency, so that the approach to these voters who so often turn the tide in elections must be made in terms of appeals to the general population and not to any specific citizen group; (3) participation at the polls is much more

characteristic of members fairly long in residence in the community.—*L. A. Noble*.

3780. Bossard, James H. S., Boll, Eleanor S., & Sanger, Winogene Pratt. (U. Pennsylvania, Philadelphia.) *Some neglected areas in family-life study*. *Ann. Amer. Acad. polit. soc. Sci.*, 1950, 272 (Nov.), 68-76.—The authors suggest six understressed areas in family living which play an important role in family stability: conversational patterns, meals, entertaining, household pets, rituals, and family councils. They advocate greater concentration on these areas on the part of research workers, teachers, and counselors.—*L. A. Noble*.

3781. Boulding, Elise. *Family adjustments to war separation and reunion*. *Ann. Amer. Acad. polit. soc. Sci.*, 1950, 272 (Nov.), 59-67.—This is a caution against too simple generalizations about family reactions to crises. A wide variety of responses to war-time separation of the husband and his ultimate return was found in the 135 families studied, with the democratic family organization producing the best adjustments. The family's definition of the crisis, and the resources on which it can draw to meet it are as important as the actual difficulty of the problem in determining its solution.—*L. A. Noble*.

3782. Goldschmidt, Walter. *Social class in America*. *Amer. Anthropol.*, 1950, 52, 483-498.—From anthropological, psychological and economic approaches to the study of class in the U. S. six criteria of class are distilled. Generalizations lead the author to see four social classes emerging from the society, each with unique cultural orientations, life ways, and status position.—*L. M. Hanks, Jr.*

3783. Goode, William J. (Columbia U., New York.) *Social engineering and the divorce problem*. *Ann. Amer. Acad. polit. soc. Sci.*, 1950, 272 (Nov.), 86-94.—The author brings out the need for all therapists in the field to consider the divorce problem both in its totality and in its magnitude in order to avoid expecting too much from "the necessarily patchwork, small-scale character" of our efforts to solve it. Since the divorce problem arises in part from the conflicting values of our society, it must be attacked basically through training for integrated values.—*L. A. Noble*.

3784. Haas, Alfred B. (Drew U., Madison, N. J.) *The therapeutic value of hymns*. *Pastoral Psychol.*, 1950, 1(9), 39-42.—The public worship of God is a form of group therapy, relieving egocentricity and isolation, in a larger perspective and social unity. The wise use of hymns for congregational singing may (1) focus attention outside of pre-occupation with self; (2) bring comfort; (3) reduce anxiety, (4) alleviate the sense of guilt, and (5) strengthen inner resources. There are emotionally immature hymns full of infantile regressions, and the pastor who knows the personality needs of his people will choose hymns that better serve the need to grow and accept social responsibilities.—*P. E. Johnson*.

3785. Mohr, Jennie. *Home-making problems of working women*. *Smith Coll. Stud. soc. Wk*, 1948,

19(1), 27-62.—As a rule, mothers work because of economic necessity. The personal problems and attitudes of working mothers are not qualitatively different from those of mothers who do not work; differences, when they do exist, can be traced to the pressures in daily living created by working and absentee management of the home. Even those who do not recognize or complain of their problems feel these pressures. Although substitute arrangements are made for managing the home, the family's interpersonal relations reflect the resulting pressures. In some cases the mother's absence from the home intensifies pre-existing problems; and, in a few rare instances, the working women appeared to be absenting themselves from home in an effort to escape uncomfortable family situations.—*G. Elias.*

3786. Raglan, Lord. *The origins of religion.* New York: British Book Centre, 1949. vii, 133 p. 95¢.—Contrary to the popular belief that religion is natural or instinctive, the author shows it to be a social institution arising only in a well-organized community. Religion is the quest of life by means of symbols; and as thought proceeds from the concrete to the abstract, it appears that belief in concrete human gods must have come before abstract invisible spirits. He traces the belief in gods to the divine kingship of the Ancient East where rites were traditionally performed which identified the king with the god to symbolize the unity and strength of the group.—*P. E. Johnson.*

3787. Ringel, Erwin. *Religion und Individual-psychologie.* (Religion and individual psychology.) *Int. Z. Indiv.-Psychol.*, 1949, 18, 145-155.—From a Catholic viewpoint it is demonstrated in what measure modern psychology has departed from the original materialistic, causal concepts to a point of convergence with the religious concepts of the Church. Points of similarity are: a common concept of the responsible individual striving after an aim, the community in Individual Psychology, God in the Church; functions of therapy in Individual Psychology and confession in the Church; contraries of striving vs. the inferiority complex, equally important, compared with the religious struggles between good and evil and the spirit and the flesh; and the psychological ideal of equality of man in the community approximating equality of men as children of God. English and French summaries.—*C. T. Bever.*

3788. Wright, Quincy. *Some reflections on war and peace.* *Amer. J. Psychiat.*, 1950, 107, 161-169.—The author analyzes war and peace from a psycho-social viewpoint using anthropological and evolutionary data to substantiate his assertions. He points up that grievances—internal and external—are chief causes of general unrest, hence war. He also sets up 4 negotiable instruments that are basic to any world peace and further stresses the value of international organization and education of the people of the world if firmer foundations of peace are to be built. 19 references.—*R. D. Weits.*

(See also abstract 4039)

LANGUAGE & COMMUNICATION

3789. Dobrogaev, S. M. *Chariz Darvin o proiskhozhdenii rechi i umstvennoi deiatel'nosti.* (Charles Darwin on the origin of speech and mental activity.) Moscow: USSR Acad. Sci., 1945. 83 p. 6 rub.—Darwin's views on the origin of speech and mental activity are presented and discussed within the Marxian framework. Darwin's hypotheses on the genesis of speech and thought underwent elucidation and supplementation in Engel's theory on the social basis of their origin and development.—*I. D. London.*

3790. England, Arthur O. (*Air Materiel Command, Dayton, O.*) *Getting your message across by plain talk.* *J. appl. Psychol.*, 1950, 34, 182-185.—A survey revealed that communications in an Air Force command were not understood. Application of the Flesch formula revealed that they were too difficult. The program devised for making communications more readable is outlined.—*C. G. Browne.*

3791. Fairbanks, Grant; House, Arthur S. (*U. Illinois, Urbana.*), & Stevens, Eugene L. *An experimental study of vowel intensities.* *J. acoust. Soc. Amer.*, 1950, 22, 457-459.—110 words, 10 for each of the 11 common American vowels, were spoken in isolation by each of 10 untrained male subjects. All the words were meaningful monosyllables of the consonant-vowel-consonant type. 8 different voiceless consonants were used. The data for vowel intensities were given by the maximum level in db for each word as measured by a sound-level-meter. An analysis of variance shows most of the differences between the mean relative intensities of the vowels to be statistically significant. Among the words for a given vowel the intensity of that vowel was found to differ significantly in most instances, a variation tentatively attributed to consonantal environment.—*W. A. Rosenblith.*

3792. Hawley, Munes E., & Kettler, A. H. (*RCA Victor Division, Camden, N. J.*) *The apparent source of speech in the mouth.* *J. acoust. Soc. Amer.*, 1950, 22, 365-369.—For each speaker the existence of a point source for a certain frequency band of a given speech sound at a known intensity was postulated and, by observation of the sound pressure at different distances from the mouth and extrapolation, the location of the apparent source was determined. For young male speakers this apparent source was located for 18 frequency bands covering the portion of the spectrum which contributes to speech intelligibility in each of 38 fundamental speech sounds (Fletcher's list). In all these tests the talker spoke at what was considered normal speaking level. "The measurements described are of an indicative rather than a statistical nature and in no way represent final conclusions on the subject."—*W. A. Rosenblith.*

3793. Lerner, Daniel. *Sykevar; psychological warfare against Germany, D-Day to VE-Day.* New York: George W. Stewart, 1949. xviii, 463 p. \$6.50.—A former officer of the Psychological War-

fare Division (SHAEF) writes a detailed, annotated account of its ideology, missions, problems, methods, personnel, and achievements. Samples of public opinion assessment, propaganda themes, and campaign materials are presented. In addition to a 52-page bibliography there are 6 appendixes containing the division's "charter," policies, tactics, publication and broadcast media, and a list of staff members. Absence of adequate overall study of the program's effectiveness is deplored, but available validation is offered. General Eisenhower is quoted: "Without doubt, psychological warfare has proved its right to a place of dignity in our military arsenal."—R. Tyson.

(See also abstracts 3716, 3728, 3745, 4006, 4020)

CLINICAL PSYCHOLOGY, GUIDANCE, COUNSELING

3794. Alvarez, Walter C. (*U. Minnesota, Minneapolis.*) *How to live with your nerves.* Chicago: Wilcox and Follett, 1950. 30 p. 60¢.—A simple and direct discussion of the mental hygiene of nervousness with suggestions on how to adjust to this condition.—M. A. Seidenfeld.

3795. Courtney, Mary E., Hill, Arthur S., Shover, Jayne, Westlake, Harold, & Borin, Leighton. *Are we neglecting the exceptional child?* *Northw. Univ. Rev. Stand.*, 1950, 14(11), 12 p.—A transcript of the radio symposium sponsored by Northwestern University's "Reviewing Stand" and the International Council for Exceptional Children. A generalized discussion on the need for more adequate facilities and personnel to deal with the problem of children and adults with physical, psychological, and social deviations from "the normal."—M. A. Seidenfeld.

3796. Feather, Don B. (*Michigan State Coll., E. Lansing.*) *The relation of personality maladjustments of 503 University of Michigan students to their occupational interests.* *J. soc. Psychol.*, 1950, 32, 71-78.—These assumptions were examined: (1) "that there is a determinable relationship between a person's personality adjustment and his occupational interests, (2) that a higher percentage of maladjusted individuals choose the Social Service, Artistic, Literary, and Music areas on the Kuder Inventory than choose any of the other areas, (3) that a higher percentage of maladjusted persons than would normally be expected have significantly higher scores on the Social Service areas of the Kuder, (4) that a higher percentage of maladjusted individuals than would normally be expected have significantly high scores on one or more of the 3 'cultural' areas on the Kuder."—J. C. Franklin.

3797. Rees, J. R. *Diagnosis and prophylaxis in psychiatry at home and abroad.* *Amer. J. Psychiat.*, 1950, 107, 81-86.—The importance of preventative psychology is discussed. Besides hospital problems, the author considers two pertinent problems in the social field: the understanding of international tensions and dealing with the problem of attitudes toward another war. Wider contacts with allied

professions and other countries is discussed in the light of a better and more realistic individual therapy. The setting up of an international institute for mental health and the carrying out of necessary research and training are highly recommended.—G. Shapiro.

3798. Stoller, Alan. (*Repatriation Commission Headquarters, Melbourne, Australia.*) *The International Congress on Mental Health.* *Med. J. Australia*, 1949, 2, 124-127.—As Australian representative to the International Congress on Mental Health held Aug. 11 to 21, 1948 in London, the author gives an epitome of the proceedings and calls attention to the World Federation for Mental Health formed during the Congress.—F. C. Sumner.

(See also abstracts 3548, 3975, 3986, 4052, 4058)

METHODOLOGY, TECHNIQUES

3799. Friedmann, Alice. *Early childhood memories of mental patients: preliminary report.* *Indiv. Psychol. Bull.*, 1950, 8, 111-116.—Following a preliminary study to develop an inquiry designed to elicit the earliest memory, 2 groups of 50 patients each were selected. One group had "predominantly neurotic features"; the other group "psychotic features mainly." Several examples are provided following which the author concludes that "the early childhood memory seems to confirm characteristic diagnostic features. It may therefore be used as a diagnostic aid or as an indicator of features of neurosis or psychosis." 21 references.—A. R. Howard.

3800. Hamvas, G. E. *La relativité de l'interprétation et la plurivalence de l'imagerie onirique.* (The relativity of the interpretation and of the plurivalence of onirique imagery.) *Psyché*, 1950, 5, 802-827.—The basic approach in the interpretation of dreams should be that of Freud, though the following modifications should be made: (1) All that occur should be analyzed as happening "now." (2) Never base an analysis on the simple recall of an event but probe the underlining reasons. (3) All dreams are not sexual in nature. (4) Some details are unimportant and should be overlooked. (5) Consider all the interests of the patient. (6) Never "translate" a dream but use the patient's own language. (7) Beware of the pluralism of symbols.—G. Besnard.

3801. Hoey, Jane M. (*Federal Sec. Agency, Washington, D. C.*) *Social work: its base, skills, and relation to other fields.* *Soc. Caswk.*, 1950, 31, 399-410.—The unique contribution social work can make to the solution of social problems and individual personality is shown to be based on the sciences of human relations and their interrelatedness.—V. M. Stark.

3802. Kasius, Cora. (Ed.) *Principles and techniques in social casework; selected articles, 1940-1950.* New York: Family Service Association of America, 1950. 433 p. \$4.50.—The editor has compiled 32 articles, published during the past ten

years which reflect the major trends in basic techniques and generic principles that developed in social casework. The contents include papers on philosophy, teaching and supervision, and casework practice.—*V. M. Stark*.

3803. Korn, Richard. *A note on the diagnostic use of the induced conversion symptom: a psychosomatic projective device.* *J. intercollegiate Psychol. Ass.*, 1950, 2, 6-7.—The writer discusses a device wherein the hypnotized patient is instructed that during the course of a conversation when any subject that is deeply troubling him is touched upon, even though he may not be aware of it, his hand will begin to tremble; he will neither be aware of the tremor nor able to control it. He feels that "by this means the patient may reveal, in an obvious and measurable manner the existence of a focus of anxiety, the source of which he still continues to repress from consciousness. . . ." Preliminary research indicates that "increases and decreases in induced tremor may be highly correlated with changes in the intensity of anxiety regarding unconscious problems."—*H. Feifel*.

3804. Oates, Wayne E. (*Southern Baptist Theol. Sem., Louisville, Ky.*) *The diagnostic use of the Bible.* *Pastoral Psychol.*, 1950, 1(9), 43-46.—The use of the Bible as an instrument of diagnosis needs extended study. Symbols and ethical situations of the Bible have dynamic connections with forces at work in the less accessible areas of personality. Three cases are summarized to show how Biblical material in the stream of speech of disturbed persons points clearly to causes of such a person's distress. Less disturbed persons may not react so obviously but the sense of what Biblical symbolism means to them is important for diagnostic and therapeutic work with religiously oriented persons.—*P. E. Johnson*.

3805. Stuit, Dewey B. (*U. Iowa, Iowa City.*) *Counseling methods: diagnostics.* *Annu. Rev. Psychol.*, 1951, 2, 305-316.—The literature between June 1949 and June 1950 is reviewed under the major headings: aptitude, achievement and intelligence tests, interest and personality measures, and the interview. 60-item bibliography.—*C. M. Louttit*.

(See also abstracts 3526, 3894)

DIAGNOSIS & EVALUATION

3806. Ammons, Robert B., & Aguero, Abelardo. (*U. Louisville, Ky.*) *The Full-Range Picture Vocabulary Test: VII. Results for a Spanish-American school-age population.* *J. soc. Psychol.*, 1950, 32, 3-10.—The authors gave the Full-Range Picture Vocabulary Test and the 1937 Stanford Binet vocabulary test to "4 girls and 4 boys in each grade, 1 to 10, in the Denver Public Schools. All children were bilingual Spanish-Americans, in the correct grade for their ages. Picture-vocabulary mean scores by grades were calculated for use as Spanish-American norms. Scores on Form A and Form B of the picture-vocabulary correlated .86, and

they correlated .85 and .82 respectively with the Binet vocabulary scores. . . . It is felt that the Full-Range Vocabulary Test can profitably be used in the individual testing of Spanish-American children, and that the separate norms should be used wherever indicated." 20 references.—*J. C. Franklin*.

3807. Cattell, Raymond B. (*U. Illinois, Urbana.*) *A guide to mental testing.* (2nd ed.) London: University of London Press, 1948. xvi, 411 p. 25s.—This is a new edition of a text designed primarily "for psychological clinics, schools, and industrial psychologists." The book consists of 8 chapters dealing mainly with the following areas: measurement of intelligence, aptitude and attainment (achievement) tests, interest, attitude, temperament, and character tests, tests of emotional adjustment, and the measurement of intra-familial attitudes.—*H. Feifel*.

3808. Challman, Robert C. (*Menninger Foundation, Topeka, Kan.*) *Clinical methods: psychodiagnosis.* *Annu. Rev. Psychol.*, 1951, 2, 239-258.—Reviewing the literature between July 1949 and June 1950 indicates the continuing preponderance of interest in projective techniques. These methods and objective tests are included in this review. 104-item bibliography.—*C. M. Louttit*.

3809. de Abreu Paiva, J. *Uma técnica de análise da personalidade.* (A technique of analysis of personality.) *Arch. bras. Psicotécnica*, 1950, 2(1), 55-122.—Positive correlations are reported between Sheldon's body-types on the one hand and medical examination, a verbal attitude questionnaire, a psychological questionnaire, the myokinetic psychodiagnostic of Emilio Mira, and the Rorschach test respectively for 18 subjects. The author concludes that the Sheldon-Stevens' technique with its objective determination of personality-aspects is sound.—*F. C. Sumner*.

3810. de Oliveira Pereira, Alfredo. *Psicodiagnóstico miocinético do Professor Emilio Mira y López; observações estatísticas.* (The Myokinetic Psychodiagnostic of Professor Emilio Mira y López; statistical observations.) *Arch. bras. Psicotécnica*, 1950, 2(2), 25-58.—The Myokinetic Psychodiagnostic Test (P M K) of Emilio Mira y Lopez is explained. P M K results are statistically compared for (1) a group of 200 normal adults; (2) a group of 25 Indians of the Kaingang tribe; (3) a group of murderers; (4) a group of 40 homicides; (5) a group of 80 members of 20 families; (6) a group of 528 immigrants; (7) a group of 177 male adolescents (candidates for the preparatory school of aeronautics) as to aggressivity; energy and vital tonus; intratensity and extratensity; emotivity; anxiety and inhibition. English summary.—*F. C. Sumner*.

3811. Eysenck, H. J. (*Maudsley Hosp., London, Eng.*) *Assessment of personality.* *Brit. med. Bull.*, 1949, 6(1-2), 16-20.—The main types of personality tests used nowadays are briefly described: (1) inventories and questionnaires; (2) objective testing techniques; (3) projective techniques; (4) observational and sociometric methods. The reader

is referred to books on these methods for more comprehensive lists and treatments.—*F. C. Sumner.*

3812. Lough, Orpha M., & Green, Mary E. (445 Union Ave., Rutherford, N. J.) Comparison of the Minnesota Multiphasic Personality Inventory and the Washburne S-A Inventory as measures of personality of college women. *J. soc. Psychol.*, 1950, 32, 23-30.—"From the analysis of 273 unmarried college women, each of whom took the individual form of the MMPI and the group Washburne S-A inventory . . . it would appear that the Washburne group test might well serve for a preliminary study of college women students and would aid in identifying those who had personality difficulties." The authors conclude from their study "that the Washburne would be very useful as a screening device which could be administered to a group and scored relatively rapidly." 31 references.—*J. C. Franklin.*

3813. Minkowska, F. Le Rorschach; son aspect clinique, formel, humain. (The Rorschach; its clinical, formal, human aspect.) *Ann. méd.-psychol.*, 1950, 2, 145-189.—The nature of the Rorschach test is set forth. The test is characterized by the association of two components: the rational-schizoid and the sensori-epileptoid. The schizoid component is reflected in the predominance of global responses at the expense of great detail, in the element of very pronounced opposition which urges the subject very often to seek forms in the white, especially in the perimacular white, and in the emotional-dreamy element. On the other hand, the epileptoid-sensory component reflects itself in impulsiveness, in explosiveness, in the concrete, in very great detail. By means of the Rorschach responses of three cases the author demonstrates the sensori-epileptoid component, the rational-schizoid, and the intermediate.—*F. C. Sumner.*

3814. Vernon, P. E. Recent developments in the measurement of intelligence and special abilities. *Brit. med. Bull.*, 1949, 6(1-2), 21-23.—A brief survey is made of newer tests of intelligence and special abilities under (1) General intelligence (tests for children, tests for adults, group tests); (2) Diagnostic testing and factor analysis (clinical methods; factorial methods); (3) Vocational and educational tests. Shortcomings of tests and their potentialities are briefly considered.—*F. C. Sumner.*

(See also abstracts 3723, 3850, 3909, 3985, 4043, 4047, 4050, 4059, 4073, 4076, 4086, 4098, 4100, 4109, 4110)

TREATMENT METHODS

3815. Alexander, Leo. Nonconvulsive electric stimulation therapy; its place in the treatment of affective disorders, with notes on the reciprocal relationship of anxiety and depression. *Amer. J. Psychiat.*, 1950, 107, 241-250.—Author presents results of a study based on 1081 electric treatments carried out on 98 patients, in 62 of which 305 nonconvulsive electric stimulation treatments, either in connection with convulsive electroshock or alone,

were used. It is concluded that nonconvulsive electric stimulation is often helpful in "the physical management of those abnormal states of emotion and mentation that are unresponsive either to electroshock or psychotherapy alone, and that sometimes remain as untreatable residuals after a course of electroshock treatments."—*R. B. Johnson.*

3816. Alexander, Leo. (Tufts Coll. Med. Sch., Boston, Mass.) The use of psychotherapy in general practice. *New Engl. J. Med.*, 1949, 241, 519-524.—The principal psychotherapeutic measures of which the general practitioner can and should avail himself are explained and illustrated: supportive treatment; ventilation; shift of emphasis; interpretation; reassurance.—*F. C. Sumner.*

3817. Brown, William. (U. Oxford, Eng.) Hypnotism and suggestion; their place in psychotherapy. *Brit. med. Bull.*, 1949, 6(1-2), 72-73; 74.—Laboratory studies by way of both electroencephalography and knee jerk indicate that hypnosis resembles the waking state more than it does sleep. The clinical application of hypnosis and the use of suggestion are discussed as to their psychotherapeutic value.—*F. C. Sumner.*

3818. Cahn, C. H. The use of drugs in group therapy. *Amer. J. Psychiat.*, 1950, 107, 135-136.—A report by author of an experiment on 8 patients who were given such drugs as caffeine, benzedrine and barbiturates in combination with group therapy. As a control, they were given glucose in the same capsule form. Benzedrine and the barbiturates increased social interaction and stimulated the discussions. Further development of this research project is encouraged to prove its practical application in therapy.—*G. Shapiro.*

3819. Cerletti, Ugo. Old and new information about electroshock. *Amer. J. Psychiat.*, 1950, 107, 87-94.—The author, cognizant of the fact that Italian journals are rarely read in this country, has presented pertinent information about electroshock. A summary is given of the early application of electric discharge (dating back to 48 A.D.) using live torpedo fish. Discussed are the author's contributions to electroshock and the part Dr. Bini played. The preparatory period, the invention of electric shock and the period of application are considered in detail. Recent advances in Italy in the application and further research of ECT are presented.—*R. D. Weitz.*

3820. Dane, Paul G. Observations upon group therapy. *Med. J. Australia*, 1949, 2, 127-129.—A brief exposition is given of group psychotherapy based on the author's observations of it in operation at St. Elizabeth's Hospital, Washington, D. C., and at Veterans Administration, Washington, D. C. The general set-up, the dynamics of group therapy, and advantages of group therapy over individual therapy are topics on which the discussion pivots.—*F. C. Sumner.*

3821. Fallaw, Wesner. (Andover Newton Theol. Sch., Newton Centre, Mass.) Beyond egoism. *Pastoral Psychol.*, 1950, 1(8), 19-25.—A counselor's

job is to help persons outgrow the self-centeredness of childhood and achieve a mature regard for other persons. Maturity is impossible for the childish adult until emotional release is effected. Psychiatrist, educator and religionist each has the same goal, though employing somewhat different methods to release negative emotions of fear or hostility, and guide the person beyond egoism into expressive channels of outgoing love. Religious education, counseling, service and worship are opportunities to learn enlarging lessons of love.—P. E. Johnson.

3822. Fisher, V. E. *The meaning and practice of psychotherapy*. New York: Macmillan Company, 1950. xv, 411 p. \$5.00.—Part I presents a general orientation to the psychotherapeutic procedure, including the first consultation, psychological testing, securing the case history, and types of therapy. In Parts II, III, and IV are presented the various techniques and approaches which the author has found to be most effective in the treatment of disorders. Part II deals with psychotic and closely related disorders, Part III with psychoneurotic reactions, and Part IV with some maladjustive psychosocial tendencies and reactions. Case histories are used throughout and 22 cases (one for each clinical syndrome covered) are fully presented in terms of treatment of the patient. 84 selected readings; 15-page glossary.—L. Solomon.

3823. Freeman, Walter. (*George Washington U., Washington, D. C.*) *An evaluation of psychosurgical methods in the treatment of psychoses*. *J. intercollegiate Psychol. Ass.*, 1950, 2, 2-6.—Before psychosurgical methods are applied, it should be evident that the patient is "facing disability or suicide because of his mental condition." The findings from psychological tests applied to psychosurgical patients, he thinks, have for the most part been equivocal. He states that although psychosurgery admittedly can make relatively few patients as good as new, nevertheless, when compared with their preoperative states, few patients are without benefit from the operation.—H. Feifel.

3824. Garrison, Mortimer, Jr. (*U. Pennsylvania, Philadelphia*) *Comparative effectiveness of therapeutic techniques*. *J. intercollegiate Psychol. Ass.*, 1950, 2, 12-15.—The writer discusses the effectiveness of various psychotherapeutic and physical therapies. He emphasizes the many debatable points that make comparative effectiveness of different therapies difficult. He thinks that "a solidly grounded evaluation of therapeutic techniques still remains to be done. It cannot be done until we determine what and how to evaluate and what we expect to alter and produce with our therapies."—H. Feifel.

3825. Glaser, Gilbert H. (*New York State Psychiatric Institute, N. Y.*) *The place of topectomy in psychosurgery*. *J. intercollegiate Psychol. Ass.*, 1950, 2, 8-11.—In the present topectomy procedure, the amount of cortex sacrificed is less than the amount disconnected by the classical translateral lobotomy. Generally, the effects of topectomy are

similar to those of the other psychosurgical procedures, particularly the lobotomies. It is as yet an unanswered question as to whether relapse is more common after topectomy or lobotomy, or has the same incidence after each. Statistics on improvement are difficult to compare because of the great variability in criteria used.—H. Feifel.

3826. Hartelius, Hans. (*Caroline Hosp., Stockholm, Sweden*) *Further experiences of the use of malononitrile in the treatment of mental illnesses*. *Amer. J. Psychiat.*, 1950, 107, 95-101.—The author offers comments on preliminary report by MacKinnon, Hock, Cammer and Waelsch on the treatment of mental illness with malononitrile, and their negative results due to the short duration of the individual treatment. This report on 40 patients substantiates the earlier report of Hyden and Hartelius: the mental effect is stimulation that becomes evident within 24-48 hours of each treatment. Both its relationship to and advantages over other forms of therapy are discussed.—G. Shapiro.

3827. Hathaway, Starke R. (*U. Minnesota, Minneapolis*) *Clinical methods: psychotherapy*. *Annu. Rev. Psychol.*, 1951, 2, 259-280.—This review of literature between April 1949 and April 1950 discusses such problems of psychotherapy as: general evaluation, research methods, nature of, types as brief, group and psychoanalytic, adjuncts to, and training. 117-item bibliography.—C. M. Louitit.

3828. Hill, Denis. (*King's Coll. Hosp., London, Eng.*) *Theories of the action of physical methods of treatment in psychiatry*. *Brit. med. Bull.*, 1949, 6(1-2), 36-42.—From an evaluation (1) of physical methods of psychiatric treatment (insulin-coma therapy, convulsion therapy, and prefrontal leucotomy); (2) of the alleged psychological effects of such physical treatments; (3) of the reported physiological evidence; and (4) of the clinical testimony, it is concluded in the absence of real evidence of specific effects from these treatments, that by the use of these physical treatments the patient's constitution is temporarily altered in such a way as to render him open to a variety of re-educative processes. The precise manner in which the constitution is altered by these means remains an intriguing but obscure problem.—F. C. Sumner.

3829. Hiltner, Seward. (*U. Chicago, Ill.*) *Concentration in counseling*. *Pastoral Psychol.*, 1950, 1(9), 26-30.—To concentrate on what a client is trying to tell and not be diverted by one's own inner tensions is one of the most difficult aspects of counseling. In developing this habit of disciplined attention the counselor gains a sense of inner strength by which to admit that his tendency to speak up and show what he knows is a need to prop up self-esteem. By accepting the pain of this insight one may then in a measure become free from a compulsion and concentrate more steadily upon the feelings of the client.—P. E. Johnson.

3830. Hiltner, Seward. (*U. Chicago, Ill.*) *Convictions in counseling*. *Pastoral Psychol.*, 1950, 1(8), 31-36.—A counselor cannot shed his convic-

tions while counseling; neither can he profess neutrality, for his convictions are a part of him, and will be of the essence of himself and his role as counselor. Yet while he may declare his convictions elsewhere, there are good reasons why he does not expound them in counseling. That distracts from the main task of drawing out the feelings of the client and non-coercively assisting him to make his own decisions wisely.—P. E. Johnson.

3831. Hyde, Robert W., & Solomon, Harry C. (*Boston Psychopathic Hosp., Mass.*) Patient government: a new form of group therapy. *Dig. Neurol. Psychiat.*, 1950, 18, 207-218.—The procedures operative for the last 3 years in the establishment of patient self-government at Boston Psychopathic Hospital are described. Recommendations are made for those interested in developing such a program. Clinical impressions of the therapeutic values are listed and emphasis placed upon the need for reduction in authoritarian supervisory roles by personnel.—L. A. Pennington.

3832. Knight, John. *The story of my psychoanalysis*. New York: McGraw-Hill, 1950. ix, 225 p. \$2.95.—This is a report by a patient under the pseudonym of John Knight of his psychoanalytic treatment. In non-technical language the patient describes conditions leading to the analysis, the analysis itself, and the final "weaning."—J. W. Bowles, Jr.

3833. Kogan, Leonard S. (*Comm. Serv. Soc., New York.*) The electrical recording of social casework interviews. *Soc. Caswk*, 1950, 31, 371-378.—Verbatim interview transcription attains scientific objectivity and has great potentialities. Both advantages and disadvantages of this technique are discussed and illustrated.—V. M. Stark.

3834. Lee, Dorothy. (*Vassar Coll., Poughkeepsie, N. Y.*) Some implications of culture for interpersonal relations. *Soc. Caswk*, 1950, 31, 355-360.—It is necessary for the caseworker to know the culture of the people he deals with in order to understand the sources of their motivation.—V. M. Stark.

3835. Ormsby, Ralph. (*Fam. Serv., Philadelphia, Pa.*) Group psychiatric consultation in a family casework agency. *Soc. Caswk*, 1950, 31, 361-365.—The primary aim of group consultation is to use the case material for the benefit of the group by means of the Socratic method of teaching.—V. M. Stark.

3836. Pepinsky, Harold B. (*State Coll. Washington, Pullman.*) Counseling methods: therapy. *Annu. Rev. Psychol.*, 1951, 2, 317-344.—Literature of the period June 1949 and May 1950 is reviewed under major headings: the profession of counseling, theory and method, the counseling process, therapy in groups, and effects of counseling. 80-item bibliography.—C. M. Louitt.

3837. Rogers, Carl R. (*U. Chicago, Ill.*) Diverging trends in methods of improving adjustment. *Pastoral Psychol.*, 1950, 1(8), 11-18.—Is our aim in improving adjustment best described as curing an illness, or as freeing a person for growth on his own

terms? To choose the former approach will lead to loss of confidence by the person himself, and social control by the few. To rest the locus of responsible evaluation with the individual is to have a psychology of personality that will lead to democracy in a deeper sense. These divergent trends to be dependent or independent are crucial in every person. And in each counselor there is one trend to be an expert who can guide others, in contrast to another trend which feels respect for what the individual can do for himself, and a suspicion at least that this is the more effective learning.—P. E. Johnson.

3838. Schneider, Pierre-Bernard. *La narcoanalyse, auxiliaire de la psychothérapie*. (Narco-analysis, an auxiliary of psychotherapy.) *Schweiz. Arch. Neurol. Psychiat.*, 1950, 65, 270-281.—Numerous recent English and French works which deal with the systematic employment of narco-analysis for treating neuroses and psychosomatic conditions are reviewed, and the successful experiences of the author in the use of narco-analysis at the Psychiatric Polyclinic of the University of Basel are recounted.—F. C. Sumner.

3839. Shea, Margene M. (*VA Hosp., Murfreesboro, Tenn.*) Planning for psychotic patients at home. *Soc. Caswk*, 1950, 31, 420-423.—A study of 16 patients demonstrates the responsibility of work with hospital personnel in strengthening the patient-family relationship and its importance as part of the total treatment process.—V. M. Stark.

3840. Taft, Jessie. (*U. Pennsylvania, Philadelphia.*) A conception of the growth process underlying social casework practice. *Soc. Caswk*, 1950, 31, 311-318.—Essential aspects of the psychological growth process based on the opposing basic needs for dependence and self-dependence are discussed as well as its application in casework.—V. M. Stark.

3841. Tatarelli, Giacinto. *La narcoanalisi; studio generale del metodo; esposizione di casi personali; applicazioni in medicina militare*. (Narcoanalysis; a general study of the method; exposition of personal cases; applications in military medicine.) *Ann. Med. nav. colon.*, 1950, 55, 167-178.—The basic notions with respect to narcoanalysis are set forth. The author reports his observations of the use of narcoanalysis in two cases: in one case, narcoanalysis was used for therapeutic purposes; in the other, for diagnostic purposes. The application of the method in military hospitals is recommended provided that always the consent of the subject is previously obtained.—F. C. Sumner.

3842. Ulett, G. A., Counts, R. M., Chapman, A. H., & Parsons, E. H. Clinical report on the use of the dimethyl ether of d-tubocurarine iodide in electroshock therapy. *Amer. J. Psychiat.*, 1950, 107, 184-189.—41 adult patients receiving electroshock treatment were intravenously given 135 administrations of dimethyl ether of d-tubocurarine iodide and a comparative study was made on 10 of them while the remaining 31 were studied clinically only. Illustrative tables are used to further show how each of the 10 patients reacted after therapy. They

conclude that dimethyl d-tubocurarine iodide seems to be a safe and useful drug to produce a lessening of the severity of convulsions in electroshock therapy. 19 references.—R. D. Weitz.

3843. Volgyesi, F. A. The recent neuro-psychiatric and bio-morphologic justifications of hypnotherapy empiricism. *Brit. J. med. Hypnotism*, 1950, 2, 6-25.—The obstacles confronting hypnotherapy, i.e., psychoanalysis and somatosomatic medicine are discussed as are stage hypnotism and allied uses. The author quotes the copious Soviet literature, and that of sundry other investigators, to show that through the nervous system, hypnosis and conditioning phenomena may be involved in all bodily occurrences. Hypnotherapy is applicable to all branches of the medical arts not only psychiatry and can be utilized in bringing about profound chemical and structural changes.—H. Guse.

(See also abstracts 3522, 3565, 3784, 3844, 4048)

CHILD GUIDANCE

3844. Ambrose, G. Child guidance and the first stage of hypnosis. *Brit. J. med. Hypnotism*, 1950, 2, 41-43.—The various stages of hypnosis are briefly reviewed in order to clarify the meaning of the term "first stage," which is defined by the author as a state of "hypno-relaxation characterized by complete relaxation, passivity and eye closure with inability to open the eyes or resist some simple commands concerning voluntary muscles." The use of such a light hypnotic trance in child psychotherapy is emphasized and the ease of obtaining such a state described. Two therapeutic cases involving children are presented as evidence of the growing recognition that light hypnotic states have great utility in psychotherapy.—M. V. Kline.

3845. Archibald, H. C. Disturbed child-disturbed family. *Arch. Pediat.*, 1950, 67, 128-132.—Several characteristics of the disturbed child are briefly discussed. The relationship between the child and the dominant adults in his environment is significant in directing his behavior.—M. C. Templin.

3846. Engel, Tinka D. (Dane Center, Madison, Wis.) The child guidance center and the community. *Soc. Caswk*, 1950, 31, 378-385.—Intake as a process that has two interrelated aspects: (1) the interpretation of agency function in the community, and (2) the interpretation of specific function in relation to the individual problem is described.—V. M. Stark.

3847. Förtschländer, Berta. Rudi. (Rudi.) *Int. Z. Indiv.-Psychol.*, 1949, 18, 181-188.—Rudi, an unwanted problem child, had attended several schools before being brought to the experimental school. His manner alienated his classmates, but his teacher was able to bring them to understand him and to adopt a kinder attitude toward him. His final acceptance by his classmates changed his attitude to one of positive cooperation, both at school and at home.—C. T. Bever.

3848. McCabe, Alice R. Meeting the emotional needs of children. *Soc. Caswk*, 1950, 31, 332-339.—The control of impulses and the development of conscience depend upon understanding the psychological and physiological processes and interrelationships.—V. M. Stark.

3849. Weissman, Irving, et al. Guardianship, a way of fulfilling public responsibility for children. Washington, D. C.: Children's Bureau, 1949. vii, 203 p. 45¢. (Child. Bur. Publ. No. 330.)—This study of guardianship procedures in 6 selected states used 5 methods of gathering information. These were: (1) review of relevant laws, (2) interviews with judges and other legal personnel, (3) observation of courts, (4) analysis of court records for the year 1945, and (5) case study of 67 children. This report describes the philosophy and history of guardianship, statutory provisions, ward-guardian relationships and characteristics, legal processes and costs, use of social services, and the impact of guardianship on other programs for children. 230-item bibliography.—I. Lazar.

(See also abstracts 3740, 3878, 3881, 3905, 4054, 4057, 4063)

VOCATIONAL GUIDANCE

3850. Ammons, Robert B. (U. Louisville, Ky.), Butler, Margaret Newman, & Herzig, Sam A. A projective test for vocational research and guidance at the college level. *J. appl. Psychol.*, 1950, 34, 198-205.—The Vocational Apperception Test (VAT) consists of 18 plates for the projective testing of personality structure related to vocational problems on the college level. The VAT was administered to college students with certain Strong vocational interests and the stories were scored and analyzed. A statistically significant relationship was found between ratings on the Strong scales and the VAT rated general attitude toward an occupation. 23 references.—C. G. Browne.

3851. Hofstein, Saul. (Jew. Com. Serv., Jamaica, N. Y.) Cooperation between social work and vocational guidance. *Soc. Caswk*, 1950, 31, 423-429.—Awareness of the similarities and differences between the fields of social and vocational guidance makes possible referrals from one field to the other and makes for most effective functioning.—V. M. Stark.

3852. Panzer, Martin. You can change your career. New York: McGraw-Hill, 1950. 274 p. \$2.95.—"Are you doing the kind of work you want to do and for which your talents are best suited?" is the question raised by the author who is an employment counselor. Although the book is written for the average man, the thesis is that successful people must have seven qualities; adaptability, stamina, commonsense, determination, reliability, courage, and ingenuity. With these as a start, the process of changing a career is dependent upon the ability to take accurate inventory of one's self, break with the past, and to ration one's energy. The

ultimate goal of such a change is joy of work, security, and leisure. The author recommends that anyone dissatisfied with his present job or profession follow the rules of this book to success; to "take a deep breath and get a fresh start."—L. R. Steiner.

3853. Rehder, Wladimir. *Pesquisa de adaptabilidade profissional dos alunos do SENAI*. (A study of the vocational adaptability of pupils of the SENAI.) *Arch. brasil. Psicotécnica*, 1950, 2(1), 7-54.—A questionnaire concerning irrational problems was administered to 357 adolescent and 304 adult pupils of the day and night classes (SENAI), specializing in graphic arts, electricity, metal, or wood trades, to find their vocational interest and adaptability. 130 of the adolescents were found definitely maladapted, 163 adapted, and 64 with replies not permitting a conclusion. 198 of the adults were definitely maladapted vocationally, 101 adapted, and 5 with replies not permitting a conclusion.—F. C. Sumner.

3854. Stephens College. *Board on Occupations. (Columbia, Mo.) Occupational planning for college women*. (Rev. ed.) Columbia, Mo.: Stephens College, 1950. 37 p. + unpaged plan sheets.—The occupational counseling service at Stephens College is described. "Master plan sheets" giving a description of the occupation and training required are given for over 100 major areas most of which are broken into described specialties. Student work forms are included.—C. M. Louitt.

3855. Wesley, S. M., Corey, Douglas Q., & Stewart, Barbara M. (*U. Southern California, Los Angeles.*) *The intra-individual relationship between interest and ability*. *J. appl. Psychol.*, 1950, 34, 193-197.—The Kuder and 7 ability tests corresponding to Kuder interest areas were administered to 156 male college students. The mean correlation between interests and ability for scores based on deviations from group means was .30. This correlation was raised to .42 when interests and ability scores were based on deviations from individual means. Rank order correlations of individual differences in interest-ability congruency ranged from - .57 to + 1.00. Implications of the study for vocational guidance are discussed.—C. G. Browne.

3856. Worthy, James C. *What employers want*. Chicago, Ill.: Science Research Associates, 1950. 48 p. 40¢.—This booklet is addressed to the young person who is looking for work or is planning to look for work. The basic things the employer seeks in any employee are skill, experience, education, and personality characteristics. These are discussed in six chapters, in relation to the topics of how to get a job, how to succeed on a job, and how to be promoted.—G. S. Speer.

(See also abstracts 4049, 4088)

BEHAVIOR DEVIATIONS

3857. Baruk, Henri. (*U. Paris, France.*) *Précis de psychiatrie*. (Compend of psychiatry.) Paris, France: Masson, 1950. xxiii, 614 p. 1600 fr.—

Mental ills are presented not as entities but as reactions to various physical and moral or psychological causes. It is emphasized that psychiatry is not a specialty but a synthesis which should be known to all physicians. The first section is devoted to general principles, clinical definitions, psychology, physiology and methods of making observations; the second section to primary syndromes from the clinical, pathogenic and therapeutic points of view; the third and fourth comprise detailed therapeutic procedures, etiology, hygiene and prophylaxis, welfare and juridical problems as well as a history of psychiatry, hospital organization, animal experimentation, the relationship of psychiatry to society.—G. Rubin-Rabson.

3858. Bosselman, Beulah Chamberlain. (*U. Illinois Coll. Med., Chicago.*) *Neurosis and psychosis*. Springfield, Ill.: C. C. Thomas, 1950. xii, 172 p. \$4.50.—Written primarily for medical students, this book does not aim at comprehensiveness. "It is an attempt to present more or less didactically, but with some illustrative reference to the case histories of patients, the results of the hard-earned knowledge of the past 50 years concerning psychodynamics in human illness and the principles of therapy connected with them." From a psychoanalytic viewpoint, the author discusses the following topics; the nature of symptoms, anxiety state, anxiety hysteria, conversion hysteria, compulsive obsessive neurosis, psychopathic personality, sexual perversions, manic-depressive psychosis, schizophrenia, paranoia and paranoid states, postpartum and involutional psychosis, organic psychosis and psychosomatic medicine.—N. H. Pronko.

3859. Bull, Nina. (*New York State Psychiatric Institute.*) *The motor mechanisms of mental conflict*. *Dig. Neurol. Psychiat.*, 1950, 18, 657.—Abstract.

3860. Burlingame, L. Lance. *Practicality of genetical control of physical and mental defects*. *Eugen. News*, 1950, 35, 9-10.—Population eugenics might find it feasible to apply legal restriction to carriers of defects known to be due to single dominant genes, and less successfully, to those from sex-linked recessive genes. Recessive autosomal genes, however, pose a distinctly different problem in that their carriers are not readily recognized; they are scattered widely throughout the general population; and they would reduce but very slowly from generation to generation even where they are detected and restricted. Mental defects will respond to a negative selection program if that program is directed to the inferior part of the curve of distribution. Positive selection from the above-average phenotypes will raise the average and increase their proportion in the population.—G. C. Schwesinger.

3861. Bykov, K. M. *Kora golovnogo mozga i vnutrennie organy*. (The cerebral cortex and the internal organs.) Moscow: Medgiz, 1947. 287 p. 35 r.—The past work of Bykov's school on conditioning of the internal organs and the interoceptors is presented in theoretical and experimental detail.

The book concludes with a consideration of the "significance of cortical regulation for biology and medicine."—*J. D. London.*

3862. Davidson, Henry A. Major English-language periodicals in the field of psychiatry. *Amer. J. Psychiat.*, 1950, 107, 233-234.—Bibliography of 57 titles.

3863. Fromm-Reichmann, Frieda. (*Chestnut Lodge Sanitarium, Rockville, Md.*) Recent advances in psychoanalysis. *J. Amer. med. Wom. Ass.*, 1949, 4, 320-326.—Recent alterations of and new departures from the classical psychoanalysis of Freud, briefly reviewed here, are in connection with (1) the developmental history of the child; (2) the concept of anxiety; (3) the Oedipus complex; (4) the role of first traumatic experience in the etiology of mental disorder; (5) psychoanalytic psychotherapy; (6) interpretation; (7) free association; (8) dream interpretation; (9) didactic psychoanalysis; (10) the set-up in psychoanalytic psychotherapy; (11) brief psychotherapy—group psychotherapy; (12) psychosomatic medicine; (13) changes in technique as applied to the psychoses.—*F. C. Sumner.*

3864. Gould, Louis N. Verbal hallucinations as automatic speech; the reactivation of dormant speech habit. *Amer. J. Psychiat.*, 1950, 107, 110-119.—The author's purpose is to submit evidence that verbal hallucination is automatic speech on the part of the percipient. 48 patients were interviewed and their clinical records studied for subjective and objective evidence of automatic activity of the neuromuscular mechanism of speech. In concluding the preliminary research, the advised therapy is one based on reduction of focal and general tension and restoration of speech along with education in social living. 33-item bibliography.—*R. D. Weitz.*

3865. Herma, Hans, & Kurth, Gertrud M. (Eds.) Elements of psychoanalysis. Cleveland, O.: World Publishing Co., 1950, xi, 333 p. \$3.00.—The aim of the editors is to acquaint the reader with the basic discoveries of psychoanalysis and its applications to every day life. The first section deals with procedures of psychoanalytic therapy, and the kinds of problems it handles and the results that might be expected. The second section introduces the reader to the basic facts and elementary concepts of psychoanalysis. Sections 3 and 4 consider such problems as childrearing, education, family interrelationships, marital maladjustment, etc. Section 5 treats of impotence and frigidity, masturbation and homosexuality. The sixth section is devoted to basic problems of psychosomatic medicine. The final section, Applied Psychoanalysis, makes psychoanalytic applications to education, religion and politics.—*N. H. Pronko.*

3866. Kurth, Wolfram. *Leitfaden der Neurologie und Psychiatrie.* (Introduction to neurology and psychiatry.) Stuttgart: Georg Thieme, 1949. vi, 305 p.—A chapter on the history of psychiatry and neurology and one on the essential literature to be recommended for intensive study preface this

introductory text on neurology and psychiatry. Part I includes neural anatomy and clinical neurology; Part II psychiatry; Part III, differential diagnosis and therapies; Part IV, general neurological and psychiatric diagnostic procedures, expert testimony and State laws pertinent to neuro-psychiatry.—*F. C. Sumner.*

3867. Llamas, Enrique. *El virus del hombre.* (The virus of man.) Bogotá: Editorial A B C, 1950. xviii, 154 p.—Fifty-four case histories are presented in this study, among which there were 18 schizophrenics, 5 manic-depressives, 13 psychoneurotics, 4 paranoics, 8 epileptics, and the rest neurotics. All of these patients were cured by surgical operation of their paranasal mucouses, where the virus of encephalitis, or the "virus of man" was lodged and through the circulatory system was affecting the brain. Thus, all the cases treated were different syndromes with a common etiological factor.—*A. Berger.*

3868. Taub, Norman. (*St. Elizabeths Hosp., Washington, D. C.*) Abnormalities of behavior. *Annu. Rev. Psychol.*, 1951, 2, 217-238.—Literature of 1949-1950 is reviewed under major headings: psychodynamics, psychosomatics, conduct disorders, psychotic disorders, psychoneuroses, mental deficiency, epilepsy and organic brain disease. 216-item bibliography.—*C. M. Louttit.*

3869. Tooth, Geoffrey. Studies in mental illness in the Gold Coast. London: His Majesty's Stationery Office, 1950. iv, 72 p. (Available from British Information Services, 30 Rockefeller Plaza, New York. 65¢.)—A report on two studies made by the author in the Gold Coast (Africa). The first deals with "the mental effects of trypanosomiasis," the second with "mental illness in the Gold Coast." Contained within the article on trypanosomiasis (African sleeping sickness) is a brief description of the disease and its mental symptoms. Tooth discusses the similarities between trypanosomiasis and schizophrenia. Case histories are included and many of the mental changes resulting from the trypanosome are discussed. The section on "mental illness in the Gold Coast" includes a discussion of the effect of social and psychological factors influencing illness in this African country and the characteristics of neurotic and psychotic illness found among European and African inhabitants.—*M. A. Seidenfeld.*

(See also abstracts 3557, 3558)

MENTAL DEFICIENCY

3870. (Aaron, Sadie, Dir.) (*Houston (Tex.) Public Schs.*) Survey reports of Texas state schools for mentally deficient. Austin, Tex.: Board for Texas State Hospitals and Special Schools, 1950. 21 p.—The state schools at Mexia and Austin were surveyed. Recommendations stress study of the populations served, personnel policy, greater adequacy of followup by trained social workers.—*W. L. Wilkins.*

3871. Burke, Noel H. M. (*Cell Barnes Colony, St. Albans, Eng.*) The aetiology of mental deficiency. *Med. Pr.*, 1949, 222, 280-282.—In about 80% of mental deficiency the chief cause is the poor quality, the genetic inferiority, of the forebears. In the remaining 20% the main cause of the deficiency can be ascribed to environmental factors which have stunted or damaged the individual between conception and the end of the growing period.—*F. C. Sumner*.

3872. Gronemeyer, W. H. Cretinism and mongolism in the same family. *J. Pediat.*, 1950, 36, 656-657.—A case of cretinism followed by a case of mongolism in the same family is presented. One previous similar family has been found. The mother of the two children reported here suffers from thyroid deficiency.—*M. C. Templin*.

3873. Harney, Sister Maureen. (*Coll. St. Scholastica, Duluth, Minn.*) Some psychological and physical characteristics of retarded girls before and following treatment with glutamic acid. Washington, D. C.: Catholic University of America Press; 1950. vii, 64 p. \$1.00.—This study was undertaken to determine the mental, achievement, personality, and physical changes (height and weight) of 31 retarded girls after at least six months administration of glutamic acid. Binet MA showed significant change; other tests showed no change or insistent gains following treatment. In general, the author concludes that glutamic acid had beneficial effects upon mental age, personality, and school achievement but did not affect physical growth.—*V. M. Staudt*.

3874. McIntire, J. Thomas. State program for the mentally deficient. Austin, Tex.: Board for Texas State Hospitals and Special Schools, 1949. 14 p. (Mimeo.)—Texas at present is providing for less than half of the mentally deficient population that should have institutional care, and it is recommended that an additional institution in west Texas be added to the state system.—*W. L. Wilkins*.

(See also abstracts 4057, 4085)

BEHAVIOR PROBLEMS

3875. Adams, Carsbie C. The cure. New York: Exposition Press, 1950. 143 p. \$3.00.—A case history, in novel form, of the development of an alcoholic and his treatment and cure. An appendix reprints a pamphlet giving advice to lay persons on the problem of alcoholism.—*W. L. Wilkins*.

3876. Bachet, M. Étude sur les états de nostalgie. (A study of nostalgic states.) *Ann. méd.-psychol.*, 1950, 2, 11-34.—It is concluded from an examination of studies, ancient and recent, of nostalgic states in soldiers and war prisoners that many descriptions merit criticism especially on account of the failure to recognize infections or even epidemic avitaminosis, that there is no doubt that a reactional depressive psychosis due to maladjustment has raged in an epidemic fashion to the point of being a scourge to armies in the field. These

nostalgic states can evolve into other psychopathological states, particularly into forms of agitated mental confusion.—*F. C. Sumner*.

3877. Baumgarten, F. Zur Psychologie der Aggression. (On the psychology of aggression.) *Mensch u. Arbeit*, 1947, 1(1), 19-27.—Baumgarten distinguishes 5 kinds of aggression: greedy, sadistic, reactive, in which attack serves as a means of defense, aggression motivated by the striving for power, and aggression undertaken from enjoyment of conflict.—*S. Adams*.

3878. Braithwaite, J. Vernon. Enuresis in childhood. *Practitioner*, 1950, 165, 273-281.—From a study of 81 cases of enuresis in children from 4 to 13 years of age over a period of 5 years, the author is convinced that enuresis is a symptom of many conditions, that it is often familial, that concomitant symptoms and physical findings point to achalasia of the detrusor and deep sleep as being the fundamental conditions, that psychological factors are of only secondary importance, and that treatment must be directed towards relieving the abnormality of the bladder tone and towards lightening of sleep.—*F. C. Sumner*.

3879. Cruvant, Bernard A., Meltzer, Milton, & Tartaglino, Francis J. An institutional program for committed sex deviants. *Amer. J. Psychiat.*, 1950, 107, 190-194.—The authors give a succinct analysis of sex deviants with 4 illustrated cases and show how the institutional program is used therapeutically as well as the problems encountered. However, they point out this group is not varied enough, recovery is poor, most cases have been exhibitionists and more research is needed.—*E. L. Wilson*.

3880. Gousenberg, Marianne. (*U. Berne, Switzerland.*) Contribution à l'étude des troubles psychiques du mercurialisme chronique. (Contribution to the study of the psychic disturbances of chronic mercury-poisoning.) *Mscr. Psychiat. Neurol.*, 1950, 120, 38-102.—The literature is critically reviewed on chronic mercurial intoxication, particularly its psychic effects, and 11 cases are presented from the author's experience.—*F. C. Sumner*.

3881. Henderson, J. L. Some functional nervous disorders in childhood. *Edinb. med. J.*, 1949, 56, 129-145.—The following functional nervous disorders in childhood are discussed as to symptoms, causes, and treatment: feeding problems, sucking habits, bowel and bladder training, temper tantrums, hysterical apnoea (breath holding), functional vomiting, nail biting, tics (habit spasms), enuresis, encopresis (subnormal bowel control), fears, phobias, night terrors, and somnambulism, compulsion neurosis.—*F. C. Sumner*.

3882. Kramer, H. C. A comparative study of a non-blood related and a blood related case of *folie à deux*. *Indiv. Psychol. Bull.*, 1950, 8, 131-149.—Two cases are cited from which the author concludes "... that inheritance, disposition, or innate receptivity cannot be factors in the development of the acceptor's psychotic condition." The latter is

markedly dependent upon the inducer as the result of early conditioning. In the psychosis of association, there exists "a lack of social interest, a poorly developed cooperative spirit, and a failing sense of security . . ." seemingly more manifest in the inducer. It is assumed that the acceptor has not completely broken with reality since symptoms frequently disappear following separation.—A. R. Howard.

3883. Stone, Abraham, & Levine, Lena. Group therapy in sexual maladjustment. *Amer. J. Psychiat.*, 1950, 107, 195-202.—Wives and husbands were assembled in separate groups to collectively tell of their sexual maladjustment. Wives had 3 sessions; first, spontaneous talking out of problems; second, report of any progress during the week; third, frank discussion of factors that condition sexual development. Next a session with the husbands where female anatomy and sexual problems were discussed. 6 months later a follow-up session with each group. Findings were: insight into the nature of the problem, understanding overall factors that condition sexual development, and accepting sexual satisfaction even though full response is not achieved.—R. D. Weitz.

3884. Thimann, Joseph. (Washingtonian Hosp., Boston, Mass.) Conditioned-reflex treatment of alcoholism; its rationale and technic. *New Engl. J. Med.*, 1949, 241, 368-370; 406-410.—After 7 years' application at the Washingtonian Hospital, Boston, Mass., of the conditioned reflex therapy for alcoholic addiction, the author attempts an evaluation of this treatment as to its rationale, technic, the physiologic risks, indications, contraindications, efficacy, and psychotherapeutic aspects.—F. C. Sumner.

3885. Zilboorg, Gregory. The sense of guilt and reality. *Dig. Neurol. Psychiat.*, 1950, 18, 226.—The issue of guilt as discussed by psychiatrist refers to unconscious, pathogenic guilt, while many moralists and theologians consider only conscious guilt. Differences in opinions between psychiatry and religion would diminish if this distinction were better understood.—L. A. Pennington.

(See also abstract 4092)

SPEECH DISORDERS

3886. Bloodstein, Oliver. (Brooklyn Coll., N. Y.) A rating scale study of conditions under which stuttering is reduced or absent. *J. Speech Hearing Disorders*, 1950, 15, 29-36.—Sixteen female and 188 male stutters were interviewed from a list of 115 conditions under which reductions in stuttering might be expected to occur. In 100 conditions, a fairly large proportion of subjects reported a substantial reduction in stuttering. The subjects varied remarkably in the degree to which they reported their stuttering to be reduced, and very few conditions appeared to result in reduced stuttering for all subjects. Generally, reduction is found under situations of reduced propositionality, mini-

mum negative reactions to stuttering, reduced need to make a favorable impression, changes in the speech pattern, activity accompanying speech, and strong or unusual stimuli.—M. F. Palmer.

3887. Brown, Joe R., & Schuell, Hildred. (VA Hosp., Minneapolis, Minn.) A preliminary report of a diagnostic test for aphasia. *J. Speech Hearing Disorders*, 1950, 15, 21-28.—This diagnostic test was designed to sample sufficient and various language components to be of aid in planning a therapeutic program and to measure progress of individual patients. The test consists of a series of questions and stimuli grouped under (1) Primary associations, (2) Symbol associations, (3) Elaboration of auditory comprehension, and (4) Conceptual processes.—M. F. Palmer.

(See also abstracts 3745, 3864, 3945)

CRIME & DELINQUENCY

3888. Bovet, Lucien. Les aspects psychiatriques de la délinquance juvénile. *Bull. World Hlth Org.*, 1950, 3, 63-162.—A medical, sociological, psychological as well as psychiatric review of origins, incidence, treatment, and prevention of juvenile delinquency. The study was "prepared on behalf of the World Health Organization as a contribution to the United Nations programme for the prevention of crime and the treatment of offenders. An English translation will be published by WHO as a separate monograph." English summary. 137 references.—J. C. Franklin.

3889. East, Norwood. (Maudsley Hosp., London, Eng.) Juvenile delinquency. *Brit. med. Bull.*, 1949, 6(1-2), 52-53.—Statistical data as to age of greatest incidence of crime and juvenile delinquency are cited. Causal factors in delinquency are briefly discussed under: (1) innate factors; (2) social factors; (3) physical factors; (4) mental and moral factors. Treatment of the juvenile delinquent should be in the hands of medical psychologists aided by trained social workers. Preventive efforts are seen as immediate requirement.—F. C. Sumner.

3890. Fox, Vernon. Michigan's experiment in minimum security penology. *J. crim. Law Criminol.*, 1950, 41, 150-166.—Results of a study for experimental purposes which was made at the Cassidy Lake Technical School are offered. There is a consistent and statistically high tendency towards success on parole for men from the minimum security institution.—V. M. Stark.

3891. Killian, Frederick W., & Arens, Richard. (Clark U., Worcester, Mass.) Use of psychiatry in Soviet criminal proceedings. Part I. *J. crim. Law Criminol.*, 1950, 41, 136-149.—Soviet forensic psychiatric practice is conservatively based on the interpretation of "accountability" of the individual. 92-item bibliography.—V. M. Stark.

3892. Monachesi, Elio D. (U. Minnesota, Minneapolis.) Personality characteristics of institutionalized and non-institutionalized male delinquents. *J. crim. Law Criminol.*, 1950, 41, 167-179.—

Statistical results and pertinent data of a study on four groups of young male delinquents and non-delinquents measured with the Minnesota Multiphasic Personality Inventory are presented.—V. M. Stark.

3893. Prendergast, F. M. G. **Criminal responsibility in incipient psychosis.** *Med. J. Australia*, 1949, 1, 447-449.—Three cases are employed to illustrate the difficulty of satisfactory assessment of criminal responsibility in incipient psychosis. The 100-year old McNaghten rules to the effect that a person is responsible for his criminal actions (a) if he knows that it is wrong, and (b) if he knows what he is doing stand in need of modification in the light of more recent psychiatric knowledge which holds that in incipient psychotic states an individual may know what he is doing and that it is wrong but yet have no capacity to control his action.—F. C. Sumner.

3894. Sorensen, Robert C. (*U. Nebraska, Lincoln.*) **Interviewing prison inmates.** *J. crim. Law Criminol.*, 1950, 41, 180-182.—Technical problems encountered in interviewing prison inmates are discussed.—V. M. Stark.

3895. Tamanyu, M. **Sensō to shōnen hanzai—koto ni kikikeizai to hanzaisharuikei no kankei o chūshin to shite.** (Juvenile delinquency and the war: a socio-psychological analysis.) *Jap. J. Psychol.*, 1948, 19, 97-116.—The current rise of juvenile delinquency in Japan is attributed to economic factors operating as a result of the war. The economic condition of Japan from 1912 to the present is surveyed, and changes in the standard of living and the effective price index are related to corresponding changes in the pattern of juvenile delinquency.—W. F. Day.

3896. Wilson, Joseph G. **Are prisons necessary?** Philadelphia: Dorrance, 1950. xii, 313 p. \$3.00.—The author writing from 35 years experience as physician and psychiatrist in a number of penal institutions concludes that prisons are not necessary. The twin evils of regimentation and celibacy are so devastating in their consequences that except for certain "moral imbeciles, defectives, and psychotics who should be incarcerated until death, other means for dealing with society's prisoners should be found." The author discusses a wide number of prison problems including the philosophy of punishment, the effects of imprisonment, sexuality in penal institutions, with emphasis on the sexual problems of women prisoners, and the values of imprisonment. A large number of partial case histories are included.—R. J. Corsini.

(See also abstract 4106)

PSYCHOSES

3897. Aronson, Morton J., & Thompson, Samuel V. **Complications of acute catatonic excitement; a report of 2 cases.** *Amer. J. Psychiat.*, 1950, 107, 216-220.—The writers give a brief historical sketch of similar cases. Then they present 2 cases with detailed analysis of test results, prognosis and

response to therapy. The summary shows the first case survived a stormy course of peripheral vascular collapse, acidosis and hyperthermia 106 degrees with a complicated recovery due to development of lower nephron nephrosis. The second case died in the course of voluntary apnea and it is suggested that suicide may be accomplished at a physiological level. 13 references.—R. D. Weitz.

3898. Betz, Barbara. (*Johns Hopkins U., Baltimore, Md.*) **Strategic conditions in the psychotherapy of persons with schizophrenia.** *Amer. J. Psychiat.*, 1950, 107, 203-215.—The author shows the importance of focusing attention on the schizophrenic person and strategic conditions in the therapeutic situation using earlier considerations in the form of eminent papers by prominent psychiatrists and clinically, through her discoveries at Phipps Clinic, Spring Grove State Hospital and Perry Point Hospital, Maryland. She states the first strategic experience is the physician who must be a strong, kind, fair person, and second he must be a perceptive person competent to understand. She further uses a rather lengthy case to illustrate her assertions and concludes that any physician can properly orient himself for effective therapeutic treatment. 26-references.—E. L. Wilson.

3899. Bonner, Hubert. (*Ohio Wesleyan U., Delaware.*) **Sociological aspects of paranoia.** *Amer. J. Sociol.*, 1950, 56, 255-262.—Paranoic disorder can be traced back to or associated with several clearly defined sociological and social-psychological factors. A family pattern of suppression, cruelty, domination, and criticism is found in a very large number of paranoic cases. Critical life-situations, such as numerous failures, divorce, death in the family, are closely related to the disorder. Marital discord, particularly, is highly associated with this psychosis. Paranoid schizophrenia, with which paranoic disorder is compared, exhibits these characteristics to a significantly smaller extent.—D. L. Glick.

3900. Cade, John F. J. (*Victorian Department of Mental Hygiene, Australia.*) **Lithium salts in the treatment of psychotic excitement.** *Med. J. Australia*, 1949, 2, 349-352.—The sedative but non-hypnotic effect of lithium salts is reported in mania patients as so specific that it leads to speculation as to the possible etiological significance of a deficiency in the body of lithium ions in the genesis of this disorder.—F. C. Sumner.

3901. Ferraro, Armando. **A new method of treatment of affective psychoses and psychoses with depressive features.** *Amer. J. Psychiat.*, 1950, 107, 136-137.—The author discusses a new therapy, using a solution of ether at various concentrations, 2.5% to 5% or more in glucose and saline, administered intravenously by slow phleboclysis. The results of the 40 patients thus treated compared favorably with those following electric shock therapy. The advantages of this form of treatment over electric shock therapy are discussed. Further investigation is needed.—R. D. Weitz.

3902. Jones, Charles H. (*Northern State Hosp., Sedro-Wooley, Wash.*), & Shanklin, James G. Transorbital lobotomy in institutional practice. *Amer. J. Psychiat.*, 1950, 107, 120-127.—Discussed are the advances in transorbital lobotomy. The use of Freeman's transorbital leucotomes and mallet is considered in relation to the success of his operative techniques. The progress of 52 patients following transorbital lobotomy by Freeman's method for periods varying from one to two years, of whom 28 are carrying on outside the hospital, bring forth the conclusion that transorbital lobotomy is simple, safe, and inexpensive and highly recommended for institutional use. 15 references.—G. Shapiro.

3903. Kapur, K. B., & Das Gupta, P. R. Sexual disorder in 'mepacrine psychoses.' *Indian med. Gaz.*, 1950, 85, 20-22.—2 cases of temporary mental disorder following mepacrine administration in patients suffering from giardia infestation are described. There appeared to be no premonitory symptoms or indications which would enable the physicians to anticipate the advent of mental symptoms in any particular patient under treatment with mepacrine. However, it must be said that both cases here reported were of high strung nervous nature. Intense sexual excitement followed the mepacrine administration. The part played by crude liver extract or vitamin B complex or both is difficult to assess. A larger series of such patients must be investigated. After recovery patients recall to great extent their unusual behavior during their illness.—F. C. Sumner.

3904. Levin, Max. The frequency of drug psychoses. *Amer. J. Psychiat.*, 1950, 107, 128-130.—The author feels the deceptive low figures of drug psychoses as found in a study by Malzberg are due to the classification of psychoses of the American Psychiatric Association, as set forth in the official statistical manual. Drug reactions are as a rule indexed under the primary condition for which the drug is given rather than "toxic reactions to drugs." The author discusses the advisability of classifying under the two headings to prevent underestimating the danger of the specific drug and to enable more accurate surveys and diagnoses.—G. Shapiro.

3905. Lurie, L. A., & Lurie, M. L. Psychoses in children—a review. *J. Pediat.*, 1950, 36, 801-809.—A brief review of the history of interest in psychoses in children and their symptomatology and treatment.—M. C. Templin.

3906. Marchand, L., Rondepierre, J., Constans, J., & Oulès, J. Aperçus sur la psychochirurgie des maladies mentales: les lésions causées par la lobotomie préfrontale. (Appraisals of the psychosurgery of mental ailments: the lesions caused by prefrontal lobotomy.) *Ann. méd.-psychol.*, 1949, 2, 513-554.—History, contraindications, and criticisms of psychosurgery are briefly set forth. The authors present a schizophrenic case which after failure to improve with other physical methods of therapy underwent bilateral lobotomy with a certain success. The patient died 3 months after the operation in the

course of an insulin coma. Autopsy revealed upon microscopical examination various brain lesions in the lobotomized areas such as zones of degeneration, atrophy, scar tissue, reticulation of white substance.—F. C. Sumner.

3907. Miyagi, O. Naiheisei no gainen. (On the concept of autism.) *Jap. J. Psychol.*, 1948, 19, 129-131.—Current efforts to systematize the widely divergent theoretical approaches to the schizophrenic processes have been hindered by the indiscriminate use of the concept of autism. The development of the concept of autism is reviewed, and eight different usages of the term are distinguished.—W. F. Day.

3908. Miyagi, O. Seishimbunretsubyō no byōzen seiakaku—tōkeiteki kenkyū. (The prepsychotic personality of schizophrenics: a statistical study.) *Jap. J. Psychol.*, 1948, 19, 117-128.—The prepsychotic personality of 68 schizophrenic patients was described in personality ratings by a member of their immediate family. Based on a comparison of these ratings with similar ratings of a control group of normals, general characteristics of the pre-schizophrenic personality pattern have been inferred; they are briefly discussed in relation to the classical theories of schizophrenia.—W. F. Day.

3909. Pflugfelder, G. (*U. Clinic, Basel, Switzerland.*) Methoden der Untersuchung auf organische Demenz. (Methods of investigation in organic dementia.) *Schweiz. Arch. Neurol. Psychiat.*, 1950, 65, 186-220.—Various psychological tests employed in the investigation of organic dementia are described, illustrated, and evaluated: (1) for practical intelligence; (2) for memory functions; (3) for mathematical functions; (4) for perceptual functions; (5) for language functions; (6) for testing of fatigue and attention. 2-page bibliography.—F. C. Sumner.

3910. Porot, Maurice, & Destaing, F. Streptomycine et troubles mentaux. (Streptomycin and mental disorders.) *Ann. méd.-psychol.*, 1950, 2, 47-74.—The literature is reviewed as to the psychotherapeutic efficacy of streptomycin in various mental disorders. Provisional conclusions from the literature are to the effect that streptomycin has been utilized with varied success in the treatment of certain mental disorders whose tuberculous etiology was very probable or merely possible; that streptomycin is capable of provoking mental disorders; that streptomycin therapy has profoundly modified the psychiatric tableau of tubercular meningitis by suspending or by retarding the course of an affection rapidly fatal up to then.—F. C. Sumner.

3911. Prout, Curtis T., & White, Mary Alice. A controlled study of personality relationships in mothers of schizophrenic male patients. *Amer. J. Psychiat.*, 1950, 107, 251-256.—25 mothers of hospitalized male schizophrenic patients were compared with 25 mothers of nonhospitalized and non-schizophrenic males by means of interview and Rorschach. While the life histories of the 2 groups were very similar, the mothers of non-patients showed "a more frankly critical attitude and a more

gregarious interest . . . , a higher level of drive and a more outgoing adjustment . . . , [and] a more ambitious, aggressive, and successful feeling as individuals." The authors feel that this resulted in freer and more realistic mother-son relationships which the patients' mother-son relationships lacked. An independent life for the mother is indicated therapeutically so that sons have a life of their own. Reactions of the sons to the mothers' attitudes was not determined.—R. D. Weitz.

3912. Rocha Filho, J. S. da. (*U. Bahia, Brasil. Psicoses traumáticas, estudo clínico e médico-legal.* (Traumatic psychosis, clinical and medical-legal study.) Rio de Janeiro: Editora Guanabara, 1950. 99 p.—The author traces the history and describes psychiatric disorders caused by cranial trauma. He illustrates with x-ray photographs and describes syndromes and personality alterations. Such syndromes depend upon histological alterations in brain tissue. He feels that such conditions should be called post-traumatic mental syndromes rather than by giving the specific label "traumatic psychosis." These conditions present a number of special problems of a medico-legal sort especially in the area of workman's compensation. 212-item bibliography.—C. M. Louttit.

3913. Schneck, J. M., & Kline, M. V. (*Westchester Dept. Health, White Plains, N. Y.*) Clinical psychiatric status and psychological test alterations following hypnotherapy. *Brit. J. med. Hypnotism*, 1950, 2, 30-41.—A case of pre-psychotic schizoid nature is presented with psychological testing before and after therapy. Hypnotherapy of a non-depth character is employed to strengthen defenses of the subject and reduce his anxiety. The Rorschach after hypnotherapy shows changes in R from 19 to 15, a decline in W% from 32 to 27. The D% increases to 67% and the Dd% also declines. This implies a diminution in obsessional material with less luxuriant fantasy, less distorted thinking and perceiving. H-T-P drawings also show changes in this direction which correlate with observable behavior.—H. Guze.

3914. Shoor, Mervyn, & Adams, Freeman H. The intensive electric shock therapy of chronic disturbed psychotic patients. *Amer. J. Psychiat.*, 1950, 107, 279-282.—"Intensive electric shock treatment was tried on a large, chronic, disturbed psychotic women's ward over a 3-month period. As a result restraint was reduced roughly 90%, seclusion roughly 66%, and sedation roughly 90%. Patients in general became better 'ward citizens.'"—R. D. Weitz.

3915. Solomon, Harry C. (*Boston (Mass.) Psychopathic Hosp.*) Problems in the treatment of psychiatric patients. *Dig. Neurol. Psychiat.*, 1950, 18, 635-636.—Abstract.

3916. Staub, H. Die Ausscheidung von Barbitursäuren bei der Dauerschlafbehandlung der Schizophrenie. (The elimination of barbiturate acids in prolonged narcotherapy of schizophrenia.) *Schweiz. Arch. Neurol. Psychiat.*, 1950, 65, 330-370.—

Study is made of the elimination of the barbiturate acids by way of the urine during and after treatment in schizophrenic patients in whom prolonged narcotherapy is employed. These studies show that the total elimination during the observation period varied according to the type of barbiturate employed: 70% for barbital; 40% for allobarbital; 20% for either phenobarbital or sandoptal, of the total dosage.—F. C. Sumner.

3917. Staub, H. Über die Verteilung von Barbitursäuren im Organismus Geisteskranker während der Schlafkur. (On the distribution of barbiturate acids in the organism of mental patients during narcotherapy.) *Schweiz. Arch. Neurol. Psychiat.*, 1950, 65, 371-380.—Analyses of the organs and blood of mental patients who died during prolonged narcotherapy in which barbiturate combinations were employed were undertaken to ascertain the distribution of the barbiturate and its possible relation to the fatal effects. Very high barbiturate contents were found in the internal organs, especially in the lungs and liver with a disturbance (delay) in distribution between blood, internal organs, and striped musculature.—F. C. Sumner.

(See also abstracts 3750, 3799, 4104, 4107)

PSYCHONEUROSES

3918. Horney, Karen. The search for glory. *Pastoral Psychol.*, 1950, 1(6), 13-20.—When from childhood a person is denied essential affection and security, his deficiencies are apt to be made up by self-idealization, which is a comprehensive neurotic solution. This becomes a persistent drive which the author names the search for glory. To understand the nature and impact of this trend we must see it as part of a coherent entity which is the antithesis of the truly religious man. The neurotic aims at absolute perfection without wanting to pay the cost. The religious person seeks in humility to take the positive steps that are essential to inner growth.—P. E. Johnson.

3919. Yost, Orin R. (*Edgewood Sanitarium, Orangeburg, S. C.*) Use of electric shock in the treatment of neuroses. *J. sth. med. Surg.*, Charlotte, N. C., 1950, 112, 1-5.—Some clinical findings of the author are reported as having caused him to revise his beliefs as to the efficacy of treatment of the neuroses and psychoneuroses by means of electroshock. A few of his case histories are furnished in which ECT proved beneficial. His best results in the use of ECT with neurotics were obtained in tension, anxiety states, and depression.—F. C. Sumner.

(See also abstracts 3508, 3799, 4109, 4112)

PSYCHOSOMATICS

3920. Almy, Thomas P., Abbot, Frank K., & Hinkle, Lawrence E. (*Cornell U. Med. Coll., New York.*) Alterations in colonic function in man under stress. IV: Hypomotility of the sigmoid colon, and

relationship to the mechanism of functional diarrhea. *Gastroenterology*, 1950, 15(1), 95-103.—In 18 patients with irritable colon, undergoing kymographic studies of sigmoid motility, a sudden and marked reduction in tone and wavelike motility (hypomotility) occurred for periods of 1 to 37 minutes. This pattern was associated with a change in the mood of the subject to one of personal inadequacy, self-reproach, and hopelessness. On 11 occasions in 6 subjects, the pattern coincided exactly with periods of weeping. Clinical and experimental evidence is presented, suggesting a link between this phenomenon and the bodily mechanism of diarrhea. The alternation of constipation and diarrhea in persons under stress is in many cases related to changes in their prevailing moods and attitudes.—*F. C. Sumner.*

3921. Bargen, J. Arnold. (*Mayo Clinic, Rochester, Minn.*) **Psychosomatic relationships in the digestive system.** *Gastroenterology*, 1950, 15(4), 581-591.—The role of chronic emotional states, particularly nervous tension and anxiety, in producing or exacerbating disorders in the digestive system is summarized and the effect of psychic stimuli on the parts of the digestive tract is gleaned from the literature. Treatment has obviously to be directed along many lines: infection has to be controlled, irritability to be allayed, general nutrition to be maintained, and the emotional soil in which all of this has grown has to be altered.—*F. C. Sumner.*

3922. Bykov, K. M. *Fiziologiya i psichosomaticheskie problemy.* (Physiology and psychosomatic problems.) In *Bykov, K. M., Problemy kortikovisceral'noi patologii*, (see 25: 3923), 5-18.—The experimental work on the conditioning of internal organs and the interoceptors by Bykov's school is summarized and its significance for a "materialist psychosomatics" affirmed. American psychosomatics is criticized for its "idealistic and reactionary basis" in Freudianism. Pavlov is accredited with establishing the "correct" approach to problems of psychopathology.—*I. D. London.*

3923. Bykov, K. M. (Ed.) *Problemy kortikovisceral'noi patologii.* (Problems of cortico-visceral pathology.) Moscow: USSR Acad. Med. Sci., 1949. 395 p. 24 rub. 60 kop.—The transactions of the conference on psychosomatics, held in Leningrad in Jan., 1948, are presented in the form of papers read at the conference.—*I. D. London.*

3924. Bykov, K. M. *Zakluchitel'noe slovo.* (Concluding remarks.) In *Bykov, K. M., Problemy kortikovisceral'noi patologii*, (see 25: 3923), 390-392.—The conference on psychosomatic problems, held in Jan., 1948 in Leningrad, is brought to a close. The fact that, when a therapist presented a paper, one frequently could not tell whether it was a physiologist or a clinician who was speaking is commended as evidence of the growing integration of physiology with the clinic.—*I. D. London.*

3925. Dibden, W. Andrew. *The hyperventilation syndrome.* *Med. J. Australia*, 1949, 2, 409-416.—

Three causes of hyperventilation namely, (1) exertion; (2) emotion; (3) heat, may occur independently but more usually two or even the three causes combine to induce attacks. The hyperventilation syndrome is, in most cases, an expression of a personality inadequacy (anxiety hysteria or obsessive-aggressive personalities). The symptom of hyperventilation (overbreathing), the importance of the hyperventilation syndrome, the hyperventilation test, and diagnosis are discussed. Treatment of the condition can be divided into (1) treatment of the acute attack and (2) treatment of the patient as a whole or psychosomatic therapy.—*F. C. Sumner.*

3926. Murphy, B. W. (*Provincial Mental Hosp., Essondale, B. C., Can.*) **Emotional aspects of essential hypertension.** *N. Z. med. J.*, 1950, 49(271), 284-289.—The author doubts the causal significance of emotional factors in hypertension and disagrees with statements concerning a specific hypertensive personality and specific conflicts. Individuals of most diverse personalities and with differing conflicts develop the disorder and their conflicts of whatever nature can adversely affect their blood pressure. The author thinks it more appropriate to maintain that emotion contributes, in the sense of exacerbation, to hypertension, the basic cause of the malady being still unknown.—*F. C. Sumner.*

3927. Richter, Derek. (*Whitechurch Hosp., Cardiff, Wales.*) **Somatic aspects of mental health and disease.** *Brit. med. Bull.*, 1949, 6(1-2), 44-48.—The interaction of body and mind is a two-way process: (1) the influence of somatic factors on the mental state and (2) the influence of the mental state on bodily functions. Somatic influences such as physical constitution, metabolic stress, toxic influence, etc., are pointed to as examples of the former; physiological changes such as skin-reactions, changes in brain produced by emotional states are cited as exemplifying the latter. The author stresses somewhat more the effects of metabolic stresses upon mental state, somatic factors in epilepsy, and somatic factors in schizophrenia.—*F. C. Sumner.*

3928. Russell, J. D. (*New South Wales Branch of the Repatriation Commissions, Sydney, Australia.*) **Movements and motivations.** *Med. J. Australia*, 1949, 2, 376-380.—Attention is drawn to the often neglected psychosomatic aspect of the orthopaedic surgeon's work. In treating a rheumatism, or backache, it is necessary to explore the emotional history of the patient for etiological constituents of the malady, if treatment is to be fully satisfactory. Halliday's three questions should guide this exploration: (1) What kind of a person is this? (2) Why of all the days and weeks of the patient's life did he take ill when he did? (3) Why did he take ill in the manner he did? A case history involving chronic backache is given to illustrate the role of psychological factors in neuro-skeletal disorders.—*F. C. Sumner.*

3929. Sullivan, A. J., & McKell, Thomas E. *Personality in peptic ulcer.* Springfield, Ill.: C. C. Thomas, 1950. x, 100 p. \$3.00.—The study is

based on clinical observations of the somatic and psychic aspects of 200 cases of peptic ulcer. The disease is considered as the end result of the interaction of several groups of factors. The study is primarily concerned with the psychological aspects. The largest sector of the patients (72%) exhibited a "typical ulcer personality" (hyperactive, ambitious, tense, conscientious, determined), characterized by a craving for superiority. In 11% deep-seated neurotic conflicts, with repressed craving for affection, were the dominant feature. In 5% no intrinsic psychological factors but marked external strain resulting in anxiety and precipitating onset of the illness was noted. In 10% no psychological factors were involved. 18 case studies. 53 references.—*J. Brožek.*

3930. Weiss, Edward; Jaffe, Beryl, & Fischer, Keith. (Temple U., Philadelphia, Pa.) Emotional problems of high blood pressure. *Amer. J. Psychiat.*, 1950, 107, 264-270.—In the etiology, pathogenesis and treatment of essential hypertension, the organic tradition in medicine must give way to the psychosomatic approach which, while not neglecting the physical aspects, includes consideration of emotion's effect. Studies reveal the role of the emotional component as it relates to the development of hypertension in some, the production of symptoms in others, and the question of treatment in nearly all. Disorder appears most often in individuals with compulsive character and therefore seems related to inhibited aggression, although all varieties of personality disturbance may be affected.—*R. D. Weitz.*

3931. Wener, J., & Polonsky, A. (McGill U. Clinic, Montreal, Can.) The reaction of the human colon to naturally occurring and experimentally induced emotional states; observations through a transverse colostomy on a patient with ulcerative colitis. *Gastroenterology*, 1950, 15(1), 84-94.—Colonic changes in response to naturally occurring and experimentally induced emotional states were observed in F. S., a 21-year old unmarried female, observations being made through a transverse colostomy performed in the case of ulcerative colitis. In general, reactions to pain, fear, and anxiety produced pallor of the mucosa and inhibition of motility. Anger, resentment, and hostility generally gave rise to hyperemia and engorgement, with moderate increase in colonic contractions. These observations are held to support a vascular concept for the initiation of ulcerative colitis.—*F. C. Sumner.*

(See also abstracts 4041, 4053, 4077)

CLINICAL NEUROLOGY

3932. Benedek, S. (Callan Park Mental Hosp., Sydney, Australia), & McGovern, V. J. A case of Alzheimer's disease with amyloidosis of the vessels of the cerebral cortex. *Med. J. Australia*, 1949, 2, 429-430.—A case of Alzheimer's dementia in a male patient hospitalized at age 49 is reported owing to the unusual feature of amyloid change in the cortical

vessels observed in post-mortem examination, the patient having died of bronchopneumonia.—*F. C. Sumner.*

3933. Fay, Temple. (Women's Med. Coll., Philadelphia.) Cerebral palsy; medical considerations and classification. *Amer. J. Psychiat.*, 1950, 107, 180-183.—An overall picture of cerebral palsy is given with a list of the 9 recognized causes and a classification table of 12 clinical categories. The need for diagnostic screening, correlation of knowledge of existing fields, training of younger personnel and proper supervisory control of community clinics is stressed.—*E. L. Wilson.*

3934. Hoffmann, Olga R., & Tenbrinck, Margaret S. Pioneering in cerebral palsy. *J. Amer. med. Wom. Ass.*, 1949, 4, 327-336.—Report is made of the proceedings of the First National Conference on Cerebral Palsy held in New York, Feb. 6 to 10, 1949. Brief abstracts of the papers are given.—*F. C. Sumner.*

3935. Jones, Margaret H. (Cerebral Palsy Clinic, Children's Hosp., Los Angeles, Calif.) The infant with a neuromuscular handicap due to cerebral palsy. *J. Amer. med. Wom. Ass.*, 1949, 4, 313-319.—Cerebral palsy or lack of normal neuromuscular control because of brain damage or anomaly, which may also involve intelligence as a whole or in part, the emotional behavior, and the special senses as well, is discussed as to its causal factors.—*F. C. Sumner.*

3936. Lennox, Margaret A., & Mohr, Jennie. (Yale U., New Haven, Conn.) Social and work adjustment in patients with epilepsy. *Amer. J. Psychiat.*, 1950, 107, 257-263.—"Twenty-two unselected male clinic epileptic patients, ages 20-52, were studied with reference to social, work, school and marital adjustment. The interrelationships between adjustability and medical and psychological factors are presented. In these patients medical handicap is greatest when seizures start before the age of 19, are frequent, are of psychomotor variety, and respond poorly to treatment." When medical handicap is marked, work adjustment is better but social and school adjustment is poorer. Acceptance of the illness and independent behavior by a patient assists work and social adjustment. While fewer families than patients accept this, most patients from such families are able to accept realistically. Two of the 10 patients married, had been divorced.—*R. B. Johnson.*

3937. Linck, Lawrence J. (National Society for Crippled Children.) The care of the cerebral palsied child in the U.S.A. *Nerv. Child*, 1950, 8, 519-523.—The National Cerebral Palsy Program is based on a three-point plan: direct services to the cerebral palsied by the state societies; education of the cerebral palsied, their parents, professional workers, and the public; and research to provide increased knowledge of the causes, prevention, care, and treatment of cerebral palsy. These are briefly discussed.—*G. S. Speer.*

3938. Lindsay, Donald S. **Encephalitis as a psychiatric problem.** *Amer. J. Psychiat.*, 1950, 107, 131-134.—Discussed are the history and symptoms of encephalitis, which is often classified as a psychosis, neurosis, or certain neurological diseases. 3 cases are presented that had symptoms on admission that were later demonstrated to be on an encephalitic basis. As such, encephalitis is a challenge to the diagnostic ability of the physician as its prognosis and treatment differ greatly from functional psychiatric illness.—R. D. Weitz.

3939. Watkins, Margaret. **(Southwestern Med. Sch., Dallas, Tex.) The value of early recognition and early therapy in cerebral palsy.** *J. Amer. med. Wom. Ass.*, 1949, 4, 48-50.—The causes (prenatal, circumnatal, postnatal) of cerebral palsy, the types of cerebral palsy (athetosis, spasticity, ataxia, tremor, and rigidity), and the treatment (physical therapy, occupational therapy, and speech therapy) are briefly summarized.—F. C. Sumner.

3940. Wilson, Lindsay. **Recent advances in apparatus used for electro-convulsive therapy and electronarcosis.** *Med. J. Australia*, 1949, 1, 451-452.—The evolution of electro-convulsive therapy apparatus from "The Solus" of Bini and Cerletti in 1937 to the recent "The MacPhail-Strauss Electroplexy Unit" or simply "The Plesacon" and the evolution of electronarcosis (or electrocoma) apparatus from the Shotter-Rich to "The MacPhail-Strauss Electrocoma Unit" or simply "The Plesacon" are traced in respect to electronic refinement and therapeutic effects.—F. C. Sumner.

(See also abstracts 3526, 4093)

PHYSICALLY HANDICAPPED

3941. Anderson, Dorothy K. **(St. Council for Blind, Philadelphia, Pa.) The social caseworker's relation to concepts of blindness.** *Soc. Caswk*, 1950, 31, 416-420.—The contribution the caseworker can make in treating the blind is attained through understanding individual differences of the blind person, accepting the family attitudes and initiating community changes.—V. M. Stark.

3942. Bakwin, Ruth M. **The blind child.** *J. Pediat.*, 1949, 35, 120-129.—Blindness is defined and its incidence and etiology discussed. The blind and sighted are compared on intelligence, learning ability, memory, school performance, reading, speech, special abilities, and personality. The problems of education, occupational choice, and care of the blind child are considered. Several books which may be recommended to the parents of blind children are suggested.—M. C. Templin.

3943. Bakwin, Ruth M. **The deaf child.** *J. Pediat.*, 1950, 36, 668-682.—The incidence and etiology of deafness are presented. The mental functioning, personality, school and occupational achievement of the deaf are described. Suggestions for care and training are given.—M. C. Templin.

3944. Coats, Dewey G. **Characteristics of communication methods.** *Amer. Ann. Deaf*, 1950, 95,

486-490.—The language of signs as used by the deaf, finger spelling as used by the deaf, and speech reading (lip reading) are compared in regard to several practical criteria. This comparison is presented in table form. The conclusion reached is that no one method of communication "is superior (for the deaf) in all respects and under all conditions."—H. R. Myklebust.

3945. Davens, Edward. **(Maryland State Dept. Health, Baltimore, Md.) Rural Maryland program for speech-hearing disorders.** *J. Amer. med. Wom. Ass.*, 1949, 4, 268-271.—"Evolution of Crippled Children's Program to include speech-hearing disorders is briefly sketched. The Hagerstown, Md., speech-hearing program is described as an example of an important segment of the general public health program which integrates community efforts in behalf of children with communicative dysfunction from the moment of case finding, through medical and audiologic diagnosis and treatment into the end stage of special education and rehabilitation. The effect of radon therapy of the nasopharynx and newer ideas in clinical audiology in influencing the development of the program are emphasized."—F. C. Sumner.

3946. Hiller, B. **(Royal Hobart Hosp., Hobart, Tasmania.) Rubella congenital inner ear deafness in Tasmania.** *Med. J. Australia*, 1949, 2, 277-283.—Of 42 congenitally deaf children in the Tasmanian Institute for the Blind and Deaf, 32 cases were due to rubella occurring in the mother in the early months of pregnancy, and the other 10 are classed as non-rubella inner ear deafness. The average degree of deafness in the rubella-deaf group is less than that in the non-rubella cases. The non-rubella congenital inner ear deafness cases were analyzed and reasons are advanced for believing that a proportion of cases so classified at present may have resulted from rubella infection in the mother during early pregnancy.—F. C. Sumner.

3947. Himes, Joseph S., Jr. **(North Carolina Coll., Durham.) Some concepts of blindness in American culture.** *Soc. Caswk*, 1950, 31, 410-416.—The problems that arise from the standard conceptions of blindness in our culture and the personality organization of the blind are defined.—V. M. Stark.

3948. The National Society for Crippled Children and Adults, Inc. **Achieving goals for the handicapped; proceedings 1949 annual convention.** Chicago: Author, 1950. 231 p. \$1.00.—A collection of papers on the medical, psychological, social, educational and vocational programs designed to aid in total rehabilitation of physically and psychologically disabled individuals.—M. A. Seidenfeld.

3949. Oléron, Pierre. **Le niveau d'intelligence des sourds-muets dans ses rapports avec l'étiologie, en particulier dans les formes présumées héréditaires.** (The intelligence level of deaf-mutes in its relations with the etiology, particularly in the presumably hereditary forms.) *Ann. méd.-psychol.*, 1950, 2, 35-46.—Critical examination is made of factors which present difficulty in reaching con-

clusions as to the intelligence level of deaf-mutes: (1) the hereditary vs. acquired character of the deaf-mutism; (2) the degree of deafness involved; (3) the intelligence level of the parents of the deaf-mutes; (4) the age at which acquired deafness came about; (5) whether tests unduly stress the linguistic; (6) differences in environmental influences.—*F. C. Sumner*.

3950. Wilkins, Leslie T. *The prevalence of deafness in England, Scotland and Wales*. *Acta oto-laryng.*, Stockh., 1950, Suppl. 90, 97-114.—Survey was carried out with two main aims: first, to yield some measure of the prevalence of deafness and second, to predict how many hearing aids might be needed under the National Health Service Act. 4% of total population or 5% of population over 16 years had hearing loss at least as great as difficulty in group conversation. Direct interviews were used. Details on age, cause, severity, region of country, social factors, hearing aids and amount of medical attention are also given. Comparison is made with similar survey in U. S. by W. C. Beasley.—*I. J. Hirsh*.

(See also abstract 4069)

EDUCATIONAL PSYCHOLOGY

3951. Chernyshevskii, N. G., & Dobrolubov, N. A. *Izbrannye pedagogicheskie vyskazyvaniia*. (Selected pedagogical pronouncements.) Moscow: Izdatel'stvo Akademii Pedagogicheskikh Nauk RSFSR, 1949. 351 p.—This is a compilation of the authors' writings on education with a summary of their educational views presented in the publisher's preface. Both Chernyshevskii and Dobrolubov (1828-1889 and 1836-1861, respectively) were political "materialists," whose educational views were expressive of the same orientation. They regarded the prevailing educational system as the reactionary tool of the ruling class, designed to submerge and to crush rather than to free the individual. Decrying the lack of educational facilities, the rigid discipline, the formal methodology, and the archaic curriculum, they advocated, instead, free public education at all levels, respect for the personality of the learner, growth through life experiences and work (suitable to the level of the learner), and the substitution of natural and social sciences for religious and classical subjects. The role of the teacher—his educational background, moral integrity and social consciousness—were deemed particularly important.—*M. G. Nemets*.

3952. Cole, Lawrence E. (*Oberlin Coll., O.*), & Bruce, Wm. F. *Educational psychology*. Yonkers, N. Y., World Book Co., 1950. xvi, 768 p. \$4.50.—The writers "have organized their material around the theme of the Mature Person, seeking to evaluate procedures and policies in the light of their contribution to the development of such a person." The 4 parts are: Life Styles in their Social Settings; Development of Personality; The Psychology of Learning in a Free Society; Putting Psychology to Work in the Schools. Appropriate instructional

films are suggested for each section. Extensive bibliography.—*E. B. Mallory*.

3953. Fremont-Smith, Frank. (*Josiah Macy Foundation, New York*) *Mental health, education, and international co-operation*. *Pastoral Psychol.*, 1950, 1(9), 13-16.—Inner compulsions interfere with human communication on the international as well as the individual level, resulting in a fractured and distorted view of the world. Under such unconscious compulsion one is deprived of free choice in and full responsibility for his actions. Now that we recognize these hidden forces that obstruct mutual understanding we can no longer afford to ignore them either in ourselves or others. If we are to make headway in prevention as well as cure, the educator must take a larger responsibility to provide effective mental hygiene for children so that they may mature free of restricting and compelling frustrations.—*P. E. Johnson*.

3954. Herndon, C. Nash. (*Wake Forest Coll., Winston-Salem, N. C.*) *Human resources from the viewpoint of medical genetics*. *Eugen. News*, 1950, 35, 6-10.—The problems of human resources are presented as a teacher's responsibility to the educators of Western North Carolina. Teachers are urged to become acquainted with the basic principles of human genetics, the detection and referral of mentally and physically defective children, the selective basis for sterilization, and they are encouraged to prepare to take a role in marriage counseling, particularly where trained counselors are not available.—*G. C. Schwesinger*.

3955. Illinois. University. Bureau of Research and Service. *The history, functions, and activities of the Bureau of Research and Service*. Urbana, Ill.: Univ. Illinois, College of Education, 1950. 20 p.—The research and other functions, organization, the history, and the field service program of the Bureau are described. Publications from the bureau between 1947 and 1950 are listed.—*C. M. Louttit*.

3956. Ravkin, Z. I. *Sovetskaya shkola v gody perekhoda na mirnyi raboty po vosstanovleniiu narodnogo khoziaistva*. (The Soviet school in the years of transition to peaceful work on the restoration of the national economy.) *Izv. Akad. pedag. Nauk RSFSR*, 1949, No. 22, 5-196.—A history of the Soviet school from 1921 to 1925 inclusive is presented. Among the questions discussed are the "political preparation of teachers," "polytechnization," and "social-political education in the school."—*I. D. London*.

3957. Shabaeva, M. F. *Gertsen o vospitaniu*. (Gertzen on problems of education.) Moscow: UCHPEDGIZ, 1948, 214 p.—Though Gertzen (1812-1870) belonged to the nobility, his views and activities were those of a revolutionary. He advocated the democratization of education through the enlightenment of the masses, a closer alignment between formal education and life experiences, and a dynamic process of instruction that will "produce a free, creative personality, actively operative in

human history." Russian education, in Gertzen's opinion, was to be closely linked with the people—their interests, aspirations, social and moral ideals. Most of his educational views were expressed in fiction, brief articles, and voluminous correspondence, excerpts of which are included in this volume.—*M. G. Nemetz.*

3958. Stroud, J. B. (*U. Iowa, Iowa City.*) *Educational psychology. Annu. Rev. Psychol.*, 1951, 2, 281-304.—This review of the literature (1949-50) is introduced by a summary of attempts to define and delimit the field. The major headings under which the literature is reviewed are: school learning, educational sociology, child study, special education, educational guidance, and educational measurement. 154-item bibliography.—*C. M. Louttit.*

3959. **Work Conference on Life Adjustment Education. Why do boys and girls drop out of school and what can we do about it?** Washington, D. C.: Office of Education, 1950. 72 p. 35¢. (Circular No. 269.)—Representatives of 40 school systems in cities of 200,000 population and larger met to discuss the problems of drop-outs. Tables as to incidence are presented, along with excerpts from talks and panels. Recommendations for studies and for improvement of situation through curriculum change, pupil personnel services, and community mobilization are presented by 4 discussion groups. 21 references.—*I. Lazar.*

SCHOOL LEARNING

3960. Chetverukhin, N. F. *Opyt issledovaniia prostranstvennykh predstavlenii i prostranstvennogo voobrazhenii uchashchikhsia.* (An experimental investigation of spatial concepts and spatial imagination in pupils.) *Izv. Akad. pedag. Nauk RSFSR*, 1949, No. 21, 5-50.—Methods and deficiencies of teaching spatial concepts and imagination are analyzed on the basis of experimental material gathered in schools. Adherence to stereotyped figures hinders the development of spatial concepts in high school pupils. The habit of conceiving plane figures as lying on the usual flat surface, instead of in any position in space, creates difficulties in the study of solid geometry.—*I. D. London.*

3961. Chetverukhin, N. F. *Predislovie.* (Preface.) *Izv. Akad. pedag. Nauk RSFSR*, 1949, No. 21, 3-4.—The present issue of the RSFSR Academy of Pedagogical Sciences is introduced, and its contents on the methodical development of spatial imagination in secondary and higher schools are briefly summarized.—*I. D. London.*

3962. Dorf, P. I. A. *Rol' nagliadnykh posobii v razvitii prostranstvennogo voobrazhenii.* (The role of visual aids in the development of spatial imagination.) *Izv. Akad. pedag. Nauk RSFSR*, 1949, No. 21, 51-84.—The visual aid movement is in full swing in the USSR. Geometric visual aids are exhibited and discussed.—*I. D. London.*

3963. Drapkina, S. E. *Ob usvoenii uchashchimisia srednei shkoly osnovnykh znanii po*

fiziologii nervnoi sistemy. (On the mastery by high school pupils of basic knowledge of the physiology of the nervous system.) *Izv. Akad. pedag. Nauk RSFSR*, 1950, No. 26, 69-92.—A report of investigations on the teaching of Pavlovian physiology in Soviet secondary schools is presented and suggestions made to improve its quality so as to ensure the inculcation of dialectical materialist *Weltanschauung*.—*I. D. London.*

3964. Fedorovich, L. V., & Kekcheeva, M. KH. *Iz opyta provedeniia uprazhnenii i reshenii zadach na proektionnom cherteze.* (From an experimental conduction of exercises and problem solving in projective drawing.) *Izv. Akad. pedag. Nauk RSFSR*, 1949, No. 21, 151-177.—A program for developing spatial imagination and computational ability, based on projective drawing, is proposed and results of an experimental investigation, based on it, are presented.—*I. D. London.*

3965. Galkina, O. I. *Psichologicheskie voprosy nagliadnosti v nachal'nom obuchenii.* (Psychological questions of visualization in elementary teaching.) *Izv. Akad. pedag. Nauk RSFSR*, 1950, No. 26, 25-68.—An investigation is reported in which the understanding of scaled simplified representation of objects by young children is shown to involve the "unity of the sensual and the logical." Verbal supplementation and comparison of objects aid in correcting false perceptions of "reality" on the basis of an abstracted representation.—*I. D. London.*

3966. Shnirman, A. L. *K voprosu o vospitanii kollektivizma u starshikh shkol'nikov.* (On the education of collectivism in older pupils.) *Izv. Akad. pedag. Nauk RSFSR*, 1950, No. 26, 93-127. To make that which is significant for the collective personally significant, investigation shows that it is necessary to involve the individual in emotionally saturated collective situations, the while his conscious relation to the collective is cultivated and defined.—*I. D. London.*

3967. Vladimirskii, G. A. *Eksperimental'noe obosnovanie sistemy i metodiki uprazhnenii v razvitii prostranstvennogo voobrazhenii.* (Experimental basis of a system and method of exercises in the development of spatial imagination.) *Izv. Akad. pedag. Nauk RSFSR*, 1949, No. 21, 95-149.—The experimental results of an investigation are described, whose aim was to work out and test methods for applying graphical material to the teaching of geometry.—*I. D. London.*

3968. Voitulevich, V. N. *Vospitanie polozhitel'nago otnoshenia k ucheniiu.* (The training of a positive attitude toward learning.) *Semia i Shkola*, 1950, I (Jan.), 11-14.—A positive attitude toward learning is a complex feeling, compounded of a variety of attitudes: feelings toward knowledge, work, teachers, discipline, etc. Since the child's basic "attitude" toward learning is established during the preschool period, parents have a serious responsibility in fostering positive attitudes in all of these areas. They can best achieve this by setting

an example through their own attitudes, by evidencing an interest in the child's intellectual growth, by manifesting faith in the child's ability, and by utilizing the child's interests in stimulating its intellectual curiosity. Close co-operation between the home and the school helps to maintain and to augment such attitudes.—*M. G. Nemets.*

3969. Zemličnaiā, A. D. *Opty razvitiā prostranstvennogo voobrazheniā uchashchikhsia na osnove primeneniā nagliadnykh posobii.* (An experiment on the development of spatial imagination in pupils on the basis of visual aids.) *Izv. Akad. Pedag. Nauk RSFSR*, 1949, No. 21, 85-94.—An experiment is described which has as its aim the development of spatial imagination through the construction of geometric models by students.—*I. D. London.*

(See also abstracts 3729, 4012, 4046, 4061, 4072, 4083, 4103)

INTERESTS, ATTITUDES & HABITS

3970. Bond, Earl D. *The student council study; a preliminary report.* *Amer. J. Psychiat.*, 1950, 107, 271-273.—Results of psychiatric and social work studies on volunteer members of student councils of 3 colleges and their families are presented. Group was considered normal, selected without interference and traced back 3 generations. "Neurotic traits were found in 34 students, 41 parents, and 42 grandparents. Psychoses were seen in no parents and only 2 grandparents." Author re-stresses the importance of neurotic traits in able people.—*R. B. Johnson.*

3971. Hites, Robert W., & Campbell, Donald T. (*Ohio State U., Columbus.*) *A test of the ability of fraternity leaders to estimate group opinion.* *J. soc. Psychol.*, 1950, 32, 95-100.—Using the percentage estimate technique, the authors tested six hypotheses concerning leader and non-leader knowledge of group attitudes in a study of the residents of 8 social fraternities. Results showed that, "elected leaders, appointed leaders, and non-leaders do not differ in ability to estimate fraternity opinion. In the present study, this holds true not only for topics with which the group is not vitally concerned but also for opinions about the day to day problems such as food, housing, and group dissensions, with which every leader should be concerned. It is possible that the fraternity groups are too homogeneous to allow for very great dissensions of opinion and that they interact so continuously that nearly everyone knows the opinions held by other members of the group."—*J. C. Franklin.*

3972. Monderer, Jack H., & Fenchel, Gerd H. (*City Coll., New York.*) *The effect of college grades on motivation and status.* *J. intercollegiate Psychol. Ass.*, 1950, 2, 16-24.—The writers investigated experimentally the effects of a shift in class grades on the subjective status of students in a classroom situation. Subjective status was defined as the

individual's conception of himself in relation to others in a hierarchical group. A graphic rating scale was used to determine the person's present and desired status within the class. The scale was administered twice to each of 62 students, once before the experimental grades were introduced and once after their introduction 3 weeks later. The results "seem to indicate that a shift in grades had no significant effects on students' present or desired statuses as measured by this scale."—*H. Feifel.*

(See also abstracts 4074, 4095, 4097)

SPECIAL EDUCATION

3973. Berger, Adolph R. (Chm.) *et al.* *The cardiac child in school and community.* New York: N. Y. Heart Assoc., 1949. 76 p.—The report of an institute held in New York in 1949. Many of the most vital elements in the life of the child with heart disease are discussed including such topics as "Teamwork in school and community," "Individual and class programs," "Individual and group guidance" and "The role of the family."—*M. A. Seidenfeld.*

(See also abstracts 3870, 4051)

EDUCATIONAL GUIDANCE

3974. Blegen, Theodore C. (Chm.), *et al.* *Counseling foreign students.* *Amer. Coun. Educ. Stud.*, 1950, 14, Ser. 6, No. 15, vii, 54 p.—The foreign visitor as a student, selecting an educational institution, selection of students from abroad, measures of the student's qualifications, distribution of opportunity, evaluation of student qualifications, early orientation, housing the foreign student, financial problems, health problems, federal regulations, proficiency in the use of English, vocational counseling, institutional orientation, relations with faculty, student organizations and experiences in the community are discussed. Practical advice is offered to those who are working with foreign students. National organizations participating in student interchange programs are listed in the appendix. Selected bibliography.—*G. C. Carter.*

3975. Robinson, Francis P. (*Ohio State U., Columbus.*) *Principles and procedures in student counseling.* New York: Harper, 1950. x, 321 p. \$3.00.—Purposes and patterns in counseling, client readiness, dynamics of adjustment, dimensions and techniques in counseling, immediate criteria in counseling, the effectiveness of counseling techniques, diagnostic categories in counseling, problems of adjustment, problems of skill, higher-level skills of adjustment and group and environmental approaches to personnel work are discussed. Illustrations and recordings of interviews are drawn from work with students in school situations, but are readily applicable in all kinds of other situations where the counselor is dealing with normal rather than clinical cases. Major emphasis is placed on the nature of the dynamic interaction of client and

counselor in the conference situation. 299-item bibliography.—*G. C. Carter.*

3976. Rothney, John W. M., & Roens, Bert A. *Guidance of American youth; an experimental study.* Cambridge, Mass.: Harvard University Press, 1950. xv, 269 p. \$5.00.—A program of study and counseling of high-school pupils in Arlington, Massachusetts public schools is described. Follow-up data, extending in some cases to eleven years after initial contact, are presented. Problems of American adolescents, development of a guidance study, growth of a guidance program and evaluation of the effects of guidance are discussed. The importance of guidance as the keystone of the arch of American education is stressed. 55-item bibliography.—*G. C. Carter.*

(See also abstract 4082)

EDUCATIONAL MEASUREMENT

3977. Bowles, Frank H. *The future of the Board.* *Coll. Bd Rev.*, 1950, No. 12, 165-167.—It is time for the College Entrance Examination Board to consider its future in terms of probable developments in secondary and higher education. There are very real judgments to be made and plans to be worked out, for there are now operating in education important forces for change. The Board must now decide whether to face toward the past and to throw its considerable weight into the maintenance of traditional requirements, or to adjust its plans to changes and developments as it sees them in the future.—*G. C. Carter.*

(See also abstracts 3550, 3551, 4080)

EDUCATION STAFF PERSONNEL

(See abstract 4087)

PERSONNEL PSYCHOLOGY

3978. Bayroff, A. G., & Burke, J. H. (*Personnel Research Section, A.G.O., Army, Washington, D. C.*) *The rater's guide.* *Personnel Psychol.*, 1950, 3, 461-465.—The Rater's Guide is a 24-page booklet containing a discussion of basic rating principles and procedures as they apply to the evaluation of military performance. This guide and the method for its use are briefly described. It is intended for army use and is not available for distribution.—*A. S. Thompson.*

3979. Bittner, Reign H. (*Prudential Insurance Co., Newark, N. J.*), & Rundquist, Edward A. *The rank-comparison rating method.* *J. appl. Psychol.*, 1950, 34, 171-177.—The rank comparison rating method is easy and understandable where ratings are to be used as criteria. It involves the following steps: (1) separation of the total group into random sub-groups; (2) ranking within sub-groups; (3) successive merging of sub-groups by a modified paired-comparison method. Comparisons with other studies reveals that this method gives results closely related to rank-comparison, paired-comparison, and rating scales.—*C. G. Browne.*

3980. Carr, Edward R., & Rothe, Harold F. (*Stevenson, Jordan & Harrison, Chicago, Ill.*) *Validity of an objectivity key on a short industrial personality questionnaire.* *J. appl. Psychol.*, 1950, 34, 178-181.—A group of college students was used to study the validity of an objectivity key used as an interview aid. Significant differences between scores when the subjects were instructed to complete the key (1) to look good, (2) to look bad, and (3) to be honest, indicated the validity of the key. Discussions of the emotional, social dominance, and drive keys are included.—*C. G. Browne.*

3981. Drucker, Peter F. *The new society.* New York: Harpers, 1950. ix, 356 p. \$5.00.—The discussions of problems of the new society, their analyses, and possible solutions, are presented in 9 parts, dealing with: the industrial enterprise, economic conflicts, management and union, the plant community, the management function, labor and the worker, big business decentralization and federalism, the self-governing plant, and the labor union as a citizen. In the concluding chapter the author proposes that ownership rights be separated from investment, that there is no choice between big and small enterprises (only between competing big enterprises and a super big government), that European Democratic Socialism is a misguided economic effort but that our best interests demand we support it because it is democratic, and that the free industrial society we can develop will be neither Capitalism or Socialism, but a new society transcending both.—*W. H. Osterberg.*

3982. Gray, Robert D., et al. (*Comp.*) *Survey of selected personnel practices in Los Angeles County as of April 1, 1949.* Pasadena, Calif.: California Institute of Technology, Industrial Relations Section, 1949. vii, 74 p. \$2.50. (Bull. No. 17.)—The survey covers various personnel practices in Los Angeles County, California. The data are divided into two groups; manufacturing including 450 employers and 154,785 employees, and non-manufacturing with 261 employers and 216,301 employees. In each division a category was established for the 203,832 factory workers and the 167,254 clerical workers.—*J. C. G. Seidl.*

3983. Hackl, K. *Rationalisierung der menschlichen Beziehungen.* (The rationalization of human relations.) *Mensch u. Arbeit*, 1947, 1(1), 28-38.—Technical considerations have little to do with human goals. We must avoid the destruction of human values. We must make a fresh start in studying man's relation to the job; build a new structure. To do so, we must examine the fundamental human drives.—*S. Adams.*

3984. Harris, Frank J. (*U. S. Public Health Service, Washington, D. C.*) *Can personality tests identify accident-prone employees?* *Personnel Psychol.*, 1950, 3, 455-459.—The frequently reported finding that a few individuals in a given group account for a disproportionately large number of accidents has led to the now-respectable hypothesis that such individuals may be 'accident-prone.'

This study was an exploratory attempt to determine empirically what personality differences could be measured between a group of 25 industrial-accident repeaters and a group of 25 industrial workers who were accident free. These two groups were carefully selected and matched on practically every relevant respect but one—accident frequency. A number of personality tests were administered to both groups and the results compared statistically. No significant differences were found to exist between the groups in their responses to the test items."—A. S. Thompson.

3985. Staugas, Leonard, & McQuitty, Louis L. (U. Illinois, Urbana.) A new application of forced-choice ratings. *Personnel Psychol.*, 1950, 3, 413-424.—The "forced-choice" approach to rating was used to develop a rating scale for the evaluation of personnel counselors—a situation where the raters do not observe the ratees at work. The procedures for scale construction developed by the Army were followed and the scale applied to 37 residence halls counselors. Comparisons with "graphic scale" and "buddy rankings" on the same subjects revealed some advantages of the forced-choice scale over the other two rating methods.—A. S. Thompson.

3986. Tredgold, R. F. Mental health in industry. *Bull. World Fed. ment. Hlth.*, 1950, 2(5), 5-9.—Observations are presented for discussion to the Annual Meeting of the Federation, including these three questions and comments on them: "(1) What body of knowledge about mental health in industry is available, and how can it be increased?; (2) What is the attitude in industry to the study of mental health?; and, (3) What is the part a psychiatrist should play in industry?" (French translation, p. 9-13.)—J. C. Franklin.

3987. Wahrheim, G. Wege zur modernen Werkleitung. (Paths of modern work leadership.) *Mensch u. Arbeit*, 1947, 1(1), 4-9.—A summary of papers for the International Congress on Rationalization, held in Stockholm in July 1947. The papers (1) Urged a humanistic, rather than an abstract materialistic treatment of work standards; (2) Favored extension and improvement of higher education in foremanship, and the thinking out of the proper content for this education; (3) Favored more objective measures in cost accounting; and (4) Discussed responsibilities of management and of workers in industrial relations.—S. Adams.

(See also abstract 4005)

SELECTION & PLACEMENT

3988. Cronbach, Lee J. (U. Illinois, Urbana), & Neff, W. D. Selection and training. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 491-513.—The literature on methods of selecting personnel and on training is so great that this review makes no attempt to cover all of it. Rather there is attempted "a strategic overview of the topics and problems that make continued research in these areas vital." In 2 major divisions problems of

selection and training are reviewed with attention being limited to the military and particularly to naval personnel. 62-item bibliography.—C. M. Louitt.

3989. Daniels, Harry W., & Otis, Jay L. (Western Reserve U., Cleveland, O.) A method for analyzing employment interviews. *Personnel Psychol.*, 1950, 3, 425-444.—60 employment interviews from 8 companies were recorded and 54 subjected to a method of technique analysis developed for this study. In addition to analysis of the time spent by the two participants in the interview, each interview was analyzed by classifying each exchange, i.e., a combination of interviewer—interviewee response, into one or more of 21 categories. The total number of exchanges for each category was taken as a pattern of the interviewer technique. Intercorrelations among the categories revealed meaningful dimensions of the interview. Primarily a methodological study, it is shown how "such an analysis would be helpful in training interviewers and in comparing the techniques of individual interviewers or of groups of interviewers.—A. S. Thompson.

3990. George, William V. Rating employee performance. (2nd ed.) University, Miss.: University of Mississippi, Bureau of Business Research, 1950. (Business Aids Ser. No. 1.) 16 p.—Introduction and discussion of employee recruitment, including use of psychological tests—6 pages; and brief discussion of merit rating—9 pages.—W. H. Osterberg.

3991. Hay, Edward N. (Aptitude Test Service, Warthmore, Pa.) Cross-validation of clerical aptitude tests. *J. appl. Psychol.*, 1950, 34, 153-158.—The Minnesota Numbers, Number Series Completion, and Name Finding tests were used to study prediction of success of 82 key punch operators. The Doolittle method gave a multiple R of .38, but it was possible to make more satisfactory predictions on the basis of a combination of cutting scores on the 3 tests. Comparisons are made with an earlier study using the same tests for bookkeepers.—C. G. Browne.

3992. Mandell, M. M. (U. S. Civil Service Commission, Washington, D. C.) The administrative-judgment test. *J. appl. Psychol.*, 1950, 34, 145-147.—The administrative judgment test is designed to aid in the selection of persons for executive positions. The items are in 5-choice form and attempt to measure the common elements in the administrative process. For 4 groups of government and military administrators, using ratings on job performance and position grade as criteria, the median-validity coefficient for the administrative-judgment test was .51 and for the ACE mental ability test, .30.—C. G. Browne.

3993. Mandell, Milton M. (U. S. Civil Service Commission, Washington, D. C.) Research findings in the field of supervisory and executive selection. *Personnel*, 1950, 27, 215-216.—Personal characteristics, subject to test, that have been found by the U. S. Civil Service Commission to be most desirable

in the selection of executive personnel are discussed. A careful job analysis of each supervisory job is needed. Evaluations of supervisory performance for research purposes should be based on the opinions both of the superiors of the supervisors and of their subordinates.—*L. N. Mendes*.

3994. Origlia, Nino. *Psicologia e servizio militare.* (Psychology and military service.) *Ann. Med. nav. colon.*, 1950, 55, 314-330.—Methods of applying psychology in the military service are discussed in connection with (1) recruitment; (2) selection; (3) classification; (4) psychological training in peace and in war; medico-psychological assistance and therapy. The last two areas are to be discussed in a subsequent article.—*F. C. Sumner*.

3995. Poruben, Adam, Jr. (*Metropolitan Life Insurance Co., Dumont, N. J.*) A test battery for actuarial clerks. *J. appl. Psychol.*, 1950, 34, 159-162.—A battery of 5 tests measuring mental alertness, numerical aptitude, and memory was administered to 125 insurance actuarial clerks. The ratio-proportion and the L.O.-M.A. 4-M tests differentiated significantly between the best and worst 25% of the sample, using performance ratings as criteria. Combination of the ratio-proportion and the Wesman Personnel Classification Tests resulted in a shrunken multiple R of .457. Great overlap existed among the tests.—*C. G. Browne*.

LABOR-MANAGEMENT RELATIONS

3996. *Arbeitsgemeinschaft für Psychotechnik in Österreich. Falsch und Richtig im Verhalten von Mensch zu Mensch im Betrieb.* (True and false in the relations between man and man in the shop.) *Mensch u. Arbeit*, 1948, 1(2), 39-40.—It is the duty of workers to have good personal relations with each other. New ideas should be freely given to other workers. Each worker should try to understand those other workers who come into conflict with him. By avoiding them, he will never understand them.—*S. Adams*.

3997. Arthur, Guy B., Jr. (*Management Evaluation Services, Inc., Toccoa, Ga.*) Employee opinion surveys that help management. *Personnel J.*, 1950, 29, 261-265.—Anonymous opinion surveys of 20 to 30 questions devised for special purposes and given to samplings of employees have done much to convince top management that it takes more than dollars to make satisfied employees.—*M. B. Mitchell*.

3998. Exton, William, Jr. Language and "reality"; semantics of industrial relations: II. *Personnel*, 1950, 27, 194-201.—Continuing a discussion of the semantics of industrial relations (see 25: 612), Mr. Exton points out various elements that contribute to misunderstandings in management-labor communications. Differences in evaluation of words and the "talking-back" situation (not necessarily oral) are barriers to realistic communication. Semantic sins of both labor and management include propaganda techniques, talking in absolutes, and the use of subjective labels. Management's quasi-

scientific jargon creates employee resentment that becomes a basic obstacle to mutual understanding. The problem calls for painstaking verbal behavior in the light of full knowledge of semantic mechanisms.—*L. N. Mendes*.

3999. French, Robert L. (*Northwestern U., Evanston, Ill.*) Morale and leadership. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 463-488.—In this article "an effort is made to outline what seemed to be the major problems" concerned with group effectiveness and morale in relation to it. In this summary group effectiveness is defined, methods of measuring it discussed, and consideration given to a variety of factors related to it. Special attention is given to the question of leadership in relation to group effectiveness with a review of definitions and questions on the selection and training of leaders. 99-item bibliography.—*C. M. Louttit*.

4000. Gottlieb, Bertram, & Kerr, Willard A. (*Illinois Inst. Tech., Chicago.*) An experiment in industrial harmony. *Personnel Psychol.*, 1950, 3, 445-453.—The labor-management history of a company is briefly reviewed, noting periods of non-union, militant anti-union, strike, and pro-union management viewpoint. Job satisfaction surveys, measuring both management-oriented and union-oriented attitudes, were conducted in 1949 when both management and the union claimed high emotional acceptance and cooperative attitudes toward each other. The survey revealed that workers most favorable toward the union also tended to be more favorable toward the management and workers most satisfied with their supervisors also tended to be more satisfied with their union steward. The tentative hypothesis is that "full emotional acceptance by management of the collective bargaining organization and studied effort at cooperation result in positive integration of employee attitudes."—*A. S. Thompson*.

4001. Gürth, Oskar. *Die Arbeitsgewinnbeteiligung als sozialpsychologisches Problem.* (Profit-sharing as a problem of social psychology.) *Mensch u. Arbeit*, 1947, 1(1), 39-47.—The profit sharing method described was developed from the proposals of Dr. Herbert Michaels. A profit-sharing fund for labor and another fund for the employer are set up after several specified expenses and reserves are taken care of. The workers participate in the plan without a minimum period of service. The worker's share should be determined equally by each of four factors: job level, need, production, and equal sharing by all. Through the satisfaction of fundamental drives of labor and of the employer, the plan should lead to stable employment and industrial peace. Accounting records of 10 to 20 years are needed to establish a sound basis for the plan.—*S. Adams*.

4002. Hersey, Rexford. (*U. Pennsylvania, Philadelphia.*) The foreman as an executive. *Personnel J.*, 1950, 29, 252-260.—The foreman utilizes two executive processes, organization and authority.

The foreman should organize his department whether he uses assistant foremen or "leads." There are three sources of authority recognized by the employees; these are (1) technical competence, (2) ability to lead and advise, and (3) authority of position.—*M. B. Mitchell.*

4003. Schenkel, Kenneth F., & Paterson, Donald G. (*U. Minnesota, Minneapolis.*) *What was wrong with my suggestion?* *Personnel*, 1950, 27, 212-215.—15 typical suggestion-rejection letters are measured by Flesch's "readability yardstick" and are found to be lacking in both reading ease and human interest. In order to communicate satisfactorily with all employees, the Reading Ease score should be over 70. The element of human interest can be increased by the use of personal pronouns, words with natural gender, and personal sentences.—*L. N. Mendes.*

4004. Seidman, Joel; London, Jack, & Karsh, Bernard. (*U. Chicago, Ill.*) *Leadership in a local union.* *Amer. J. Sociol.*, 1950, 56, 229-237.—The circumstances of joining a union become relatively unimportant where the union's method of operation, the status it achieves, or the pressure of events leads people to become active in its affairs. All the leaders of a union local identified themselves with the union and believed it had brought about substantial gains. Such identification indicates that the union has become a way of life, serving the needs of its members apart from, and in addition to, the reasons that initially brought it into existence.—*D. L. Glick.*

INDUSTRIAL AND OTHER APPLICATIONS

4005. Bellows, Roger M. (*Wayne U., Detroit, Mich.*) *Industrial psychology.* *Annu. Rev. Psychol.*, 1951, 2, 173-192.—Literature of the period August 1949 to June 1950 including interview, selection and placement testing, job analysis and evaluation, criteria, training, leadership, employee morale, and advertising and market research is reviewed. 98-item bibliography.—*C. M. Louttit.*

INDUSTRY

4006. Abrams, M. H. (*Cornell U., Ithaca, N. Y.*) *Voice communications: personnel and phraseology.* In *NRC, Human factors in undersea warfare*, (see 25:4021), 233-241.—Research on problems of voice communications in a noisy environment (particularly the submarine) is reviewed. The selection and training of operators, and the standardization of phraseology are included. 24-item bibliography.—*C. M. Louttit.*

4007. American Psychological Association. *Armed forces familiarization course in military psychology.* Washington: American Psychological Association, 1949, v.p.—This volume includes 14 lectures given for Army, Navy, and Air Force personnel by the American Psychological Association under an ONR contract in March to May 1949.

Each lecture is an introductory summary of psychological problems of interest to the military under the areas indicated by the titles. The lectures are: Dael Wolfe, Introductory orientation on the nature of psychology and its methods applied to military problems; Morris Viteles, Training and training aids; C. L. Shartle, Job analysis and evaluation; John Flanagan, Selection and classification of men for maximal military use; L. L. Thurstone, Analysis of human abilities; Donald B. Lindsley, Psychophysiology: military research and applications of studies of vision, hearing, motor functions, and environmental stress; William E. Kappauf, Principles of human engineering and biomechanics; Laurance Shaffer, Problems of adjustment and control of emotions; Robert Felix, Preventing and curing mental casualties; S. A. Stauffer, Measurement of attitude and morale; John R. P. French, Social behavior and interpersonal relations; Fillmore H. Sanford, Military leadership; Rensis Likert, Propaganda and psychological warfare; Donald G. Marquis, The present and future of military psychology.—*C. M. Louttit.*

4008. Barr, Norman Lee. *Visibility of cockpit instruments.* *CADO Tech. Data Dig.*, 1950, 15(10), 26-32.—Since the advent of high-altitude flight, pilots frequently experience difficulty in seeing and reading cockpit instruments while in flight. One of the reasons is that instruments have decreased in size and increased in number. Pilots flying towards the sun on a hazy day, as well as pilots flying at very high altitudes, frequently must continue their gaze within the cockpit for an appreciable length of time and sometimes shield their eyes for a time before the instruments become visible. The length of time that the pilot must focus on instruments becomes critical in congested traffic, in formation flying, and in aerial military tactics. The author has made a study of the factors involved in poor instrument visibility with a view to finding a means to remedy the difficulties.—(Courtesy of *CADO Tech. Data Dig.*)

4009. Berrien, F. K. (*Colgate U., Hamilton, N. Y.*) *Relation of noise to the habitability of submarines.* In *NRC, Human factors in undersea warfare*, (see 25:4021), 345-355.—The physiological and psychological reactions to noise are a problem of particular significance on submarines. The literature in the general area has been reviewed with particular attention being paid to noise deafness, nonauditory effects, general fatigue, adaptation to noise, and annoyance from noise. Because of individual differences problems of personnel screening may be important. 100-item bibliography.—*C. M. Louttit.*

4010. Coakley, John D. *Human operators and automatic machines.* *Personnel Psychol.*, 1950, 3, 401-411.—The fallacy of the belief that automatic production equipment eliminates variability in the product is demonstrated in this study of the production of three operators on the same automatic nylon hosiery machine. "Costly variability in the hose

produced was found not only among operators but also among stockings knitted by the same operator. Significant savings in expensive materials and in the cost of subsequent operations could be realized through the reduction of product differences within and among operators on automatic and semi-automatic equipment. Product standardization is shown to be a problem to which the psychologist as well as the engineer can offer valuable assistance."—*A. S. Thompson.*

4011. Craig, D. R., & Ellson, D. G. (*Indiana U., Bloomington.*) The design of controls. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 133-151.—". . . a general treatment of the relationships between control design variables and the operating characteristics of man-machine combinations." A review of literature yields a "heterogeneous mass of unrelated facts . . . [but] little generalization is possible." The authors suggest needs in research. 22-item bibliography.—*C. M. Louttit.*

4012. Crook, Mason N. (*Tufts Coll., Medford, Mass.*) Printed materials, maps, and charts. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 61-76.—Reviews problems of perception related to reading of maps and charts with a survey of literature on reading of printed material in general. 60-item bibliography.—*C. M. Louttit.*

4013. Garner, W. R. (*Johns Hopkins U., Baltimore, Md.*) Auditory signals. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 201-217.—Auditory signals as used in this review refer to auditory displays or information communication with non-speech sounds. Kinds of information conveyed, examples of auditory signals, and a series of basic psychological (perceptual) problems involved are discussed. 36-item bibliography.—*C. M. Louttit.*

4014. Griffith, John W., Kerr, Willard A., Mayo, Thomas B., Jr. (*Ill. Inst. Tech., Chicago.*), & Topal, John R. Changes in subjective fatigue and readiness for work during the eight-hour shift. *J. appl. Psychol.*, 1950, 34, 163-166.—379 manual, office, and supervisory employees were measured with a Kerr "tear ballot" for subjective feelings of tiredness and restfulness in the various hours of an eight hour work shift. The resulting curves for all groups were similar—maximal fatigue in the 4th and 8th hours and maximal restfulness in the 2nd and 6th hours.—*C. G. Browne.*

4015. Hebestreit, Hermann. Die Kennzeichnung der Arbeitsbeanspruchung und ihre praktische Bedeutung. (Characterization of job demands and its practical significance.) *Arch. Gewerbeopath. Gewerbehyg.*, 1940, 10, 164-222.—Our knowledge concerning the influence on physical and mental health of the mode of life, including occupational activity as an important component, is very limited. Acquisition of a large material necessary for a study of this problem presupposes an efficient and uniform system of describing the demands made by the work on the worker. The author attempted to develop

such a system. Ten aspects of work are considered (muscular effort, posture, nervous strain, climatic conditions, demands on eyes and ears, type of meals available, duration of work, work pauses and transportation between home and work, and special noxious conditions). Each category is further subdivided, up to 9 divisions. The categories are described and illustrated by examples. The application of the coding system to ceramics and plastics industry, coal mining and road building is presented in considerable detail.—*J. Brozek.*

4016. Kappauf, William E. (*Princeton U., N. J.*) The design and use of instruments. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 77-99.—Research on perceptual factors in accuracy and speed of reading instrument dials or other indicators is reviewed. Particular interest is in relevance to submarine instruments. 94-item bibliography.—*C. M. Louttit.*

4017. Kerr, Willard A. (*Ill. Inst. Tech., Chicago.*) Accident proneness of factory departments. *J. appl. Psychol.*, 1950, 34, 167-170.—Accidents per 100 workers per year for 53 accident prone and non-accident prone factory departments ranged from 0.0 to 22.7. Significant correlation coefficients revealed that accidents tended to occur with greatest frequency in those departments with lowest intra-company transfer mobility rates, smallest per cent of female and salary employees, least promotion probability, and highest mean noise level. A fundamental change in the psychological frame of reference in which the average employee works may produce the probability of fewer accidents.—*C. G. Browne.*

4018. Kleitman, Nathaniel. (*U. Chicago, Ill.*) The sleep-wakefulness cycle of submarine personnel. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 329-341.—Because of the nature of the vessel and its operating procedures, problems of sleep and rest for personnel take on special characteristics. These problems are discussed and there is reported a study on the USS Dogfish of the actual sleep amount and cycle reported and certain measures of physiological conditions and alertness. Recommendations for further research are made and certain watch schedules are proposed.—*C. M. Louttit.*

4019. Machado Vieira, Marius V., et al. Observação do trabalho de linotípista, realizada na escola técnica nacional (of. de artes gráficas), em Junho de 1946. (Observation of the work of linotype, made in the National Technical School (workshop of graphic arts), in June, 1946.) *Arch. brasil. Psicotecnica*, 1950, 2(1), 133-140.—A job-analysis of linotyping as observed in the composition of a text is reported. The psychic conditions necessary in the linotype are: (1) an equilibrium between visual and tactal perceptions; (2) a visual-haptic-kinaesthetic equilibrium; (3) immediate visual apprehension; (4) topographical memory; (5) a type of comprehensive-assimilative intelligence; (6) a temperament almost non-emotional (schizoth-

mic); (7) rapidity and good dissociation of movements; (8) good capacity for controlled and, at the same time, distributed attention.—*F. C. Sumner*.

4020. Miller, George A. (*Harvard U., Cambridge, Mass.*) Voice communication: effects of masking and distortion. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 243-248.—Research on factors which mask or distort voice communications in a noisy environment is reviewed under the headings: intelligibility and speech intensity, masking, frequency selectivity, and aptitude selectivity. 28-item bibliography.—*C. M. Louitt*.

4021. National Research Council. Committee on Undersea Warfare. Panel on Psychology and Physiology. A survey report on human factors in undersea warfare. Washington: National Research Council, 1949. x, 541 p. \$2.25.—This volume includes some 24 chapters each devoted to an interpretive review of literature from psychology on topics pertinent to submarine operation. These chapters are divided into 9 parts concerned with vision, design of equipment, audition, communication, habitability, emotional stability, and selection and training. Each contribution has been separately abstracted in this issue.—*C. M. Louitt*.

4022. Neff, W. D. (*U. Chicago, Ill.*), & Thurlow, W. R. Auditory discrimination in sonar operation. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 219-230.—Auditory perception in sonar operation requires detection of a sound signal appearing in a noise background. Research related to the perceptual problems of this task are reviewed. 70-item bibliography.—*C. M. Louitt*.

4023. Nóbrega de Lemos, Lygia; Contardo da Fonseca, Luzia; Novaes, Manoel, & Soares Vaz, Vasco. Relatório realizado pelo sub-grupo de lataria pertencente ao grupo de serraria. (A job- and time-analysis pertaining to a brazier subgroup under locksmith work.) *Arch. bras. Psicolécnica*, 1950, 2(1), 125-132.—A time-study of (1) each of the 8 operations involved in making a brass rim, (2) each of the 10 operations involved in making a frieze rim, and (3) each of the 7 operations involved in soldering the two rims was made on apprentices and masters. Conclusions are: (1) that training influences the speed in execution of the work; (2) that the median time utilized by the master for doing the work is less than that for apprentices; (3) that the various operations in relation to the global work may be classified into fundamental and marginal operations.—*F. C. Sumner*.

4024. Smith, Anthony J. (*U. Kansas, Lawrence*.) Menstruation and industrial efficiency. II. Quality and quantity of production. *J. appl. Psychol.*, 1950, 34, 148-152.—86 women in the aircraft and garment industries were observed to determine the relationships between various phases of the menstrual cycle and industrial efficiency as measured by quality and rate of production. Differences in daily quality of production were small and not related to the menstrual cycle. All of the analyses of production rate except two revealed no statistically significant

differences occurred. They appeared to be the result of situational determinants rather than menstrual function.—*C. G. Browne*.

4025. Stellar, Eliot. (*Johns Hopkins U., Baltimore, Md.*) Human factors in panel design. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 153-175.—Optimum arrangement of control-indicator panels involves factors of human perception and action. The limited literature in this area is reviewed including limits of working areas, distribution of work over body parts, and location, patterning, use frequency, and confusion of controls and displays. 36-item bibliography.—*C. M. Louitt*.

4026. Tinker, Miles A. (*U. Minnesota, Minneapolis*.) Lighting and color. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 357-374.—Literature on illumination and color significant for working under artificial conditions is reviewed with particular attention to perceptual aspects of illumination and certain psychological aspects of color in living or working environments. The findings from general studies are applied to a discussion of artificial illumination and color in submarines. 34-item bibliography.—*C. M. Louitt*.

4027. Verplanck, William S. (*Indiana U., Bloomington*.) Visual communication. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 249-266.—Exterior visual communications especially as used between ships and particularly submarines, is described and the psychological aspects of the problems involved discussed. Such communication systems involve questions of perception, memory, understanding, training, etc. A number of methods of signaling are separately discussed. 14 references.—*C. M. Louitt*.

4028. Williams, Stanley B. (*Johns Hopkins U., Baltimore, Md.*) Visibility on radar scopes. In *NRC, Human factors in undersea warfare*, (see 25: 4021), 101-130.—Review of visual research related to cathode ray tube design and human visual requirements, with particular emphasis on intensity modulated scopes. 59-item bibliography.—*C. M. Louitt*.

(See also abstracts 3568, 3569, 3573, 3579, 3631, 3650, 3665, 3790)

BUSINESS & COMMERCE

4029. Bayton, James A. (*Howard U., Washington, D. C.*) Consumer preference research in the Department of Agriculture. *Agric. Econ. Res.*, 1950, 2, 105-112.—The research on attitudes conducted by the Bureau of Agricultural Economics is briefly traced from its beginnings late in the 1930's. Several recent projects in consumer preferences, using area sampling open-ended interviewing, and occasionally paired comparisons, are described.—*F. C. Sumner*.

4030. Gallup, George. Impact: a new method for evaluating advertising. *Journalism Quart.*, 1950, 27, 378-382.—As the result of 14 years of research the impact method of evaluating was developed. It

relies largely upon "recall" and "aided recall" whereas the readership method leaned heavily upon "recognition." In the first stage of the development of the impact method it was limited to the pre-testing of advertisements since 1949. The method has been applied to regular copies of national magazines. The basic interviewing procedure includes: qualifying respondents, proved name recall, idea registration, buying urge, identification and product use. Of all facts gathered by this procedure, the "playback" of the advertiser's message is the most important. The impact method can be applied to any medium. "Impact results are forcing a new conception of advertising effectiveness."—V. Goertzel.

4031. Gillman, Leonard. (*Mass. Inst. Tech., Cambridge.*) Operations analysis and the theory of games: an advertising example. *J. Amer. statist. Ass.*, 1950, 45, 541-545.—The theory of games is applied to an advertising competition. Functions of susceptibility and resistance to advertising are used in a mathematical model to determine the strategy and spending rates of the participants in the campaign.—G. C. Carter.

4032. Lucas, D. B. (*New York U.*), & Britt, Steuart Henderson. Location and size of magazine advertisements: 1. Left-hand and right-hand magazine pages. *Advertising Agency*, 1950, 43, 50-51; 106.—Most of the studies reported here show that the right-hand magazine page has a slight advantage over the left. The results should be interpreted and applied with caution, however. For example, what holds for magazines may not hold for newspapers; the right-hand advantage has not been established if the printing is in a language read from right to left; and if the present tendency of publishers to put advertisements on the right persists, and if other reading matter is more interesting, the left-hand page may become the more favored.—W. H. Osterberg.

4033. Lucas, D. B. (*New York U.*), & Britt, Steuart Henderson. Location and size of magazine advertisements: 2. Page location of magazine advertisements. *Advertising Agency*, 1950, 43, 52-53; 149-150.—In the 1930's a study was made of fixed locations in the Saturday Evening Post. The best location was found to be page 4, which was the page facing the lead editorial article. There appeared, also, to be a gradual building up from the inside front cover to the advertisement facing the lead editorial article. Another study in 1941, based on the same magazine, emphasized the uniformity of audience traffic throughout the book.—W. H. Osterberg.

4034. Lucas, D. B. (*New York U.*), & Britt, Steuart Henderson. Location and size of magazine advertisements: 3. Influence of size of magazine advertisements. *Advertising Agency*, 1950, 43, 72-74; 88.—Although experiments in psychological laboratories have shown that doubling the size or intensity of a stimulus does not mean that the effect will be anywhere near doubled, a study of full-page vs. half-page ads showed that just about twice as

many readers saw the full-pages as saw the half-pages. The apparent contradiction here is due to the fact that magazine ads are not presented in isolation, and stimuli in laboratories usually are. The cost of a full-page ad is double that of a half-page, and this seems more than justified when the added prestige of the former is considered.—W. H. Osterberg.

4035. Lucas, D. B. (*New York U.*), & Britt, Steuart Henderson. Location and size of magazine advertisements: 4. Influence of thickness of the magazine. *Advertising Agency*, 1950, 43, 70-71; 126.—It has been reported elsewhere that advertisements in a thick magazine (around 120 pages) are not remembered by the reader to the extent that similar advertisements in a thin magazine (80 pages) are. It is offered here, that the reason for this conclusion is a function of the reader interviews rather than the thickness of the magazine itself. An interview testing recall on a thick magazine is necessarily longer than one with a thin book, and the boredom resulting is usually the reason for the low recall. However, Starch observed that the number of advertisements in a magazine caused little reduction upon coupon flow unless the number exceeded 100.—W. H. Osterberg.

4036. Martin, Edward A. *Psychology of funeral service*. Grand Junction, Colo.: Author, 1950. (3rd ed.) ix, 293 p.—"When people in grief must be served, the principles of such service must be based on sound psychological knowledge. . . . Applying common sense to funeral service means first, an understanding by the mortician of the emotions of bereaved families and how they react to the stimulus of grief and second, giving a service that will satisfy and relieve the emotional and unusual situation in which they are placed. . . . The psychological purpose for the service of the mortician is to provide a memory picture in the minds of the bereaved that will be as comforting as possible, for it is something they will carry with them for the rest of their lives." The book includes the essentials of a descriptive course in introductory psychology plus original material pertinent to this profession.—L. R. Steiner.

4037. Wedding, Nugent. *Public relations in business, a study of the activities of large corporations*. *Univ. Ill. Bull.*, 1950, 47(79), 46 p. (U. Illinois Bur. Econ. Bus. Res., Bull. 71.)—Public relations men in 85 large firms, and 8 independent public relations counselors were interviewed. The firms are classified into 4 groups: (1) producers or distributors of consumer goods or services, (2) producers or distributors of industrial goods, (3) railroads, public utilities, and one air line, and (4) banks. 13 tables are presented, showing for each group such information as: the way in which public relations is defined, the number of companies with separate departments, the activities included in a public relations program, and methods used for measuring the effectiveness of public relations programs. Among other findings reported was the one that 49 (57.6%) of the firms had made no at-

tempt to measure the effectiveness of their programs.
—W. H. Osterberg.

PROFESSIONS

4038. Ford, Albert H. Prediction of academic success in three schools of nursing. *J. appl. Psychol.*, 1950, 34, 186-189.—A battery of tests was administered to trainees in three schools of nursing. Three of the tests—ACE Cooperative Science Test, George Washington University Reading Test, and high school points average—yielded a multiple R of .697. The trainees showed interests in science and social service as measured by the Kuder, but these scores did not add to the predictive power of the battery.—C. G. Browne.

4039. Morlan, George K. (Springfield (Mass.) Coll.) An experiment on the recall of religious material. *Religion in Life*, 1950, 19, 589-594.—In this follow-up of an earlier study on what people remember of sermons, the author read four sermons to students in two classes; then after two weeks asked them to indicate what they could recall. Of the 94 returns 50 could not retell enough to tabulate, while 44 were able to do so. By classifying the material recalled he concludes that sermons are better remembered when they present a shock, when they deal with the interests or problems of the people, and when they present theological problems honestly with courage. Imagery or word pictures do not prove as effective as in the earlier experiment where non-students were interviewed.—P. E. Johnson.

4040. Newbold, G. The importance of hypnotism in midwifery. *Brit. J. med. Hypnotism*, 1950, 2, 2-6.—The value of hypnosis and suggestion in obstetrics is reviewed by the author in brief. He points up the following uses of hypnosis in such medical practice: (1) as an aid in establishing a psychologically sound attitude toward pregnancy and labor; (2) as an aid in securing adequate muscular relaxation; (3) as a means of abolishing painful uterine contractions; (4) as a galactagogue; (5) as a means of inducing labor; (6) as an analgesic agent for the suture of perineal lacerations, etc.; (7) as a method for controlling the vomiting of pregnancy, particularly that which might lead to hyperemesis gravidarum.—M. V. Kline.

4041. Stolzenberg, Jacob. *Psychosomatics and suggestion therapy in dentistry*. New York: Philosophical Library, 1950. xi, 152 p. \$3.75.—It is the intention of the author to "... present clinically and academically facts that are basic factors in developing a successful practice. The technology of dental practice is only one small phase of many integrated parts that contribute to the whole of dentistry." A brief introduction to psychosomatics is followed by chapters on psychosomatics in dentistry, the philosopher's stone of successful practice, psychosomatic therapy and hypnodontics. Chapter bibliographies.—J. W. Bowles, Jr.

4042. Wagner, Ralph F. (U. Pittsburgh, Pa.) Critical requirements for dentists. *J. appl. Psychol.*,

1950, 34, 190-192.—The critical incident technique was used to determine the characteristics of successful dental students and effective practicing dentists. The method is based on judgments of individual behavior which was particularly effective or ineffective, the judges in this study being patients, dentists, and dental clinic instructors. On the basis of 781 incidents, the following aspects in serving as a general practitioner developed: (1) demonstrating technical proficiency; (2) handling patient relationships; (3) accepting professional responsibility; (4) accepting personal responsibility.—C. G. Browne.

(See also abstract 4090)

UNPUBLISHED THESES

(Copies available through inter-library loan)

4043. Astrachan, Myrtle A. Aggression and dysphoria in projective tests. 1950, Ph.D., Yale U.

4044. Auld, Benjamin F., Jr. The effects of tetraethylammonium on a habit based on fear. 1950, Ph.D., Yale U.

4045. Axelrod, Howard S. The effects of electro-shock convulsions on temporal maze behavior. 1950, Ph.D., U. Pittsburgh.

4046. Baker, William F. Differential prediction of achievement in general psychology at the University of Kentucky. 1950, M.A., U. Kentucky.

4047. Barnett, Irving. The influence of color and shading on the Rorschach test. 1950, Ph.D., U. Pittsburgh.

4048. Barron, Francis Xavier. Psychotherapy as a special case of personal interaction: prediction of its course. 1950, Ph.D., U. California.

4049. Beattie, Mary E. The association of level of aspiration on mental tasks with measures of vocational interest. 1950, M.A., Catholic U.

4050. Beckley, Ralph Williams. A study of some clinical aspects of two standardized interest inventories. 1950, M.A., U. New Hampshire.

4051. Bell, Carl Joseph. A survey to locate the handicapped children in Community Unit District Number Four, McLean County, Illinois. 1950, M.S., Illinois State Normal U.

4052. Berger, Emanuel M. The relation of expressed self-acceptance to the expressed acceptance of others. 1950, Ph.D., U. Pittsburgh.

4053. Blixt, Eleanor Dearborn. An investigation of psychogenic and emotional factors operating in cases of functional dysmenorrhea. 1950, M.A., U. New Hampshire.

4054. Bolin, Byron J. The relationship of duration of birth to childhood anxieties as reflected in the Rorschach test. 1950, Ph.D., U. Kentucky.

4055. Bond, Hudson James. The isolation of urban subcultures through social dimensions. 1950, Ph.D., U. California.

4056. Brooks, Frances Nadine. A comparative study of the achievement and adjustment of twenty-

four superior children. 1950, M.S., Illinois State Normal U.

4057. Copeland, Lynn Preston. Personality differences between a group of adolescents with behavior disorders and normally well-adjusted children as revealed on the Machover Draw-A-Person projective test. 1950, M.A., Catholic U.

4058. Cornett, Stephen J. The relationship between pleasant and unpleasant early memories and social adjustment. 1950, M.A., U. Kentucky.

4059. Cummings, S. Thomas. An investigation of the reliability and validity of judgments of adjustment inferred from the Rorschach test performance. 1950, Ph.D., U. Pittsburgh.

4060. Davis, Emmett R. Personality correlates of changes in intelligence test scores. 1950, M.A., U. Kentucky.

4061. Dugan, Robert D. The relationship between permanence of stated interest and academic success. 1950, M.A., U. Kentucky.

4062. Estes, Betsy W. A study of the relationship between thoroughbred broodmares and their offspring in respect to temperament of dam and performance of offspring. 1950, Ph.D., U. Kentucky.

4063. Fielden, Charles Lawrence. The value patterns and process concepts of socially accepted and socially unaccepted eleventh grade boys. 1950, M.S., U. Tennessee.

4064. Gleitman, Henry. The effects of drive upon learning. 1950, Ph.D., U. California.

4065. Griffith, Richard M. Typical dreams: a statistical study of personality correlates. 1950, Ph.D., U. Kentucky.

4066. Hammes, John A. Critical flicker frequency and attention. 1950, M.A., Catholic U.

4067. Harney, Sister Maureen. Some psychological and physical characteristics of retarded girls before and following treatment with glutamic acid. 1950, Ph.D., Catholic U.

4068. Hogue, Henry William. The effects of hypnosis on free association. 1950, M.A., U. New Hampshire.

4069. Jervis, Frederick M. A study of responses of blind students to experimentally induced frustration. 1949, M.A., U. New Hampshire.

4070. Kann, Jules. An exploratory study of the relationship of certain psychological variables to the degree of difficulty of childbirth. 1950, Ph.D., U. Pittsburgh.

4071. Kerr, Ann Hamrick. Color preferences of socially accepted vs. socially unaccepted six- and seven-year-old boys. 1950, M.S., U. Tennessee.

4072. Kessinger, Newell LaVern. An analysis of errors in instrumental sight reading. 1950, M.S., Illinois State Normal U.

4073. Klopfer, Walter George. An investigation of the associative stimulus value of the Szondi pictures. 1950, Ph.D., U. California.

4074. Kohl, Dorothy M. The drinking habits of a group of college women. 1949, M.A., U. New Hampshire.

4075. Krastell, Olive J. A study on the emotional effects of music. 1950, M.A., Catholic U.

4076. Lipstadt, Jack L. The significance of high and low scores on personality inventories. 1949, M.A., U. New Hampshire.

4077. McElroy, George E. The relation between the amount of anxiety as depicted by projective technique and the degree of tuberculosis as diagnosed by medical authority. 1950, M.A., U. New Hampshire.

4078. McGehee, Charles R. The effect of attitude toward psychology upon performance in a psychological experiment. 1950, M.A., U. Kentucky.

4079. McGrane, Franklin J. An experimental approach to the distinction between the powers of sensory synthesis and sensory recognition in normals. 1950, M.A., Catholic U.

4080. Machen, Lorelle Horning. The relationship of A.C.E. Q, L, and total scores to college grades and achievement. 1950, M.A., Catholic U.

4081. Marshall, Frances P. Metabolic factors in the relationship between myopia and visual acuity. 1950, M.A., Catholic U.

4082. Martin, Frank B., Jr. The construction of an inventory to aid in the counseling of probation students. 1950, M.A., U. Kentucky.

4083. Martin, Geraldine Anne. The relation of adjustment scores and spelling abilities. 1950, M.S., Illinois State Normal U.

4084. Martin, William B. The role of isolation in the spread of effect. 1950, M.S., U. Kentucky.

4085. Melhado, Julian J. Irradiation and generalization in aments. 1949, M.A., U. New Hampshire.

4086. Moriarty, Francis M. Motivational sources of bias in personality judgments. 1950, Ph.D., Yale U.

4087. Naffziger, Joseph Valentine. A study of the personality characteristics of juniors in a teacher education program as revealed by the Minnesota Multiphasic Personality Inventory. 1950, M.S., Illinois State Normal U.

4088. Neumann, Thomas Michael. A study of the relation of occupational interests to certain aspects of personality. 1950, M.S., Illinois State Normal U.

4089. Nolan, Carson Y. Audiogenic seizures and the oestrous cycle in the white rat. 1950, M.A., U. Kentucky.

4090. Orr, David H. A field study of a psychiatric aide applicant group at a state mental hospital. 1950, Ph.D., U. Kentucky.

4091. Palmer, Francis H. The effects of electro-convulsive shock upon retention of complex tasks in the cat and rat. 1950, Ph.D., U. Pittsburgh.

4092. Pittluck, Patricia. The relation between aggressive fantasy and overt behavior. 1950, Ph.D., Yale U.

4093. Prater, Garland F. A comparison of the head and body size in the drawing of the human figure by hemiplegic and non-hemiplegic persons. 1950, M.A., U. Kentucky.

4094. Prince, Albert L., Jr. Anxiety as a determinant in the prediction of social phenomena. 1949, M.A., U. New Hampshire.

4095. Purkey, Ernest. A comparison of gifted and average high school students with respect to mental health, study habits, interests, and problems of living. 1950, M.S., Illinois State Normal U.

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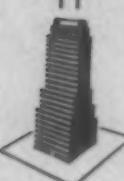
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